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ABSTRACT

Findings and recommendations are presented from a three-year evaluation of the Transfer Center Pilot Program (TCPP), which was implemented in 20 California community colleges and universities to increase community college transfer rates among Blacks, Hispanics, Native Americans, and low-income and disabled students. Transfer centers were established on community college campuses to identify, encourage, and assist potential transfer students, strengthen curricular coordination, and work with existing programs. Three models of service delivery were used: a group approach, an individual approach, and a mixed approach. Volume 1 presents an overview of evaluation results and recommendations pertaining to program continuation, expansion, and improvement. Major findings are highlighted, including that supportive administrative environments aided effective Transfer Center implementation, that individual and mixed approaches were most successful in identifying and serving students, that a campus-wide focus on transfer and faculty involvement in the program helped the centers meet their goals, and that counseling improvements and more work to help less motivated students were needed. Volume 2 begins with an introduction to the TCPP, a profile of transfer center campuses, and an overview of the evaluation methodology. Subsequent chapters focus on: (1) implementation of TCPP at community colleges and four-year institutions, and intersegmental cooperation; (2) a descriptive profile of transfer students, comparing students from colleges with state-funded transfer centers (SFTC's) and those from other colleges, and comparing students who were and were not transfer center students; (3) an assessment of the effectiveness of the TCPP in terms of transfer rates to University of California (UC) and California State University (CSU) campuses; and (4) a summary and conclusions regarding program implementation and program effectiveness. The appendixes include the evaluation topics covered during fieldwork interviews, the student questionnaire, and transfer data for 1982-83 through 1987-88, and statistical data and methods. (WJT)

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AN EVALUATION OF
THE TRANSFER CENTER PILOT PROGRAM

EXECUTIVE SUMMARY
and
RECOMMENDATIONS

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Berman, Weiler Associates
August 1989

Prepared for
The Intersegmental Advisory Committee on Transfer

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AN EVALUATION OF
THE TRANSFER CENTER PILOT PROGRAM

Volume 1

EXECUTIVE SUMMARY
AND
RECOMMENDATIONS

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August 1989

R-114/2

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ABSTRACT

The Transfer Center program was created by agreement among the four segments of higher education, as one means among many for eliminating obstacles to transfer -- particularly for underrepresented students. This independent evaluation found that the Transfer Center Pilot Program was implemented successfully and increased transfer rates, particularly to the University of California.

This report recommends:

Program Continuation and Expansion

1. Continue the Transfer Center program at Pilot Program colleges, and provide funding to expand the program to other colleges.
2. Phase in program expansion and funding over a period of three to five years.
3. Give under-served regions of the state high priority in program expansion.
4. Maintain state oversight of the program at a level comparable to that exercised during the Pilot Program.
5. Increase funding at four-year colleges as the program expands, to insure their capacity to work with additional community colleges.

Program Improvement

6. Incorporate successful Pilot Program components into the Transfer Center model.
7. Intensify efforts to serve underrepresented ethnic minority students.
8. Require program participants to develop and implement strategies to motivate and serve students who have traditionally not been expected to transfer.
9. Clarify program expectations and accountability for four-year institutions.
10. Require four-year programs to be directed by at least a full-time coordinator plus necessary support staff, and provide state funding to support this requirement, particularly through increased funding for CSU Transfer Center programs.
11. Encourage regional mechanisms for collaboration and problem resolution.

PREFACE

This executive summary presents an overview of the findings of a three-year evaluation of the Transfer Center Pilot Program, together with recommendations pertaining to program continuation, expansion, and improvement.

The genesis of the Pilot Program was a concern among state policymakers, higher education officials and civil rights groups that community college transfer rates were too low, particularly among ethnic minority, disabled, and other students who were underrepresented among transfers to four-year institutions. Following intersegmental development of a Transfer Center plan, the program was funded by the state legislature in the Budget Act of 1985, and initiated in 1985-86 at twenty community colleges, eight UC and fourteen CSU campuses, and thirteen independent colleges and universities. The intersegmental plan called for an independent evaluation of the program to assess the effectiveness of Transfer Centers, recommend ways in which they could be improved, and recommend to the Legislature and the Governor whether Transfer Centers should continue to be funded.

A contract was awarded to BW Associates in August 1986 to evaluate the Pilot Program. The evaluation was conducted under contract to the Office of The Chancellor, California Community Colleges, and has reported to the Office of the Chancellor and to INTER-ACT, an intersegmental advisory committee.

Volume 2 of this report presents the complete evaluation findings. Volume 3 is Appendix D, which provides statistical data and information on statistical methods used for the analysis of program effectiveness.

ACKNOWLEDGEMENTS

Many individuals provided direct assistance and invaluable advice to the study team conducting the evaluation. At the Chancellor's Office, California Community Colleges, Dr. Judy C. Miner was responsible for administering the Pilot Program and monitoring the evaluation contract from May 1986 to August 1988, after which Dr. Connie Anderson fulfilled these duties. Both provided knowledgeable direction and advice, and much appreciated encouragement and support. Other Chancellor's Office staff who provided very useful assistance include Milt Shimabukuru, Kathleen Nelson, Bill Hamre, Buster Sano, Jerry Hudson and Chuck McIntyre.

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Campus faculty and administrators at participating community colleges, CSU and UC campuses who cooperated with the evaluation are too numerous to name. Their assistance was instrumental in making arrangements for fieldwork visits, and they were most generous in setting aside time for interviews and providing documentary materials.

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A. BACKGROUND

The Transfer Center Pilot Program was a three-year intersegmental effort designed to increase the rate at which community college students transferred to four-year colleges and universities to complete their baccalaureate degrees. The program was particularly aimed at improving the transfer rates of black, Hispanic, Native American, low-income and disabled students, who have historically been underrepresented among community college transfers to four-year institutions. The Pilot Program began in 1985-86; it was implemented by twenty community colleges, eight UC campuses, fourteen of the nineteen CSU campuses and thirteen independent colleges and universities (see Tables 1 and 2).[1]

The twenty community colleges selected to participate in the Transfer Center Pilot Program (SFTC) were widely distributed geographically (in northern, central, and southern California) and in various types of communities (urban, rural and suburban). On the average, the Transfer Center colleges were more likely to be of medium size and enroll a higher percentage of black and Hispanic students than community colleges statewide. Their share of total transfers to UC and CSU the year before the Pilot Program began was proportional to their share of total community college enrollment, with a slightly higher share of UC transfers (see Tables 3 and 4).

The independent evaluation of the program was designed to answer two questions:

(1) Was the program implemented successfully by participating community colleges and public-four year colleges and universities?

(2) Was the program effective in increasing transfer rates, particularly among underrepresented students?

The evaluation methods used to answer these questions included fieldwork at participating two- and four-year colleges, a brief telephone survey of some 200 recent transfers enrolled at three four-year campuses, analysis of statewide data on community college students and transfers to UC and CSU, and a statistical analysis of transfer activity statewide before and after Pilot Program implementation.

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[1] The evaluation focused on transfer rates for Asian, black, Hispanic and white students transferring to UC and CSU. The number of Native American and other ethnic minority students transferring was too small to permit reliable statistical estimates of their transfer rates. The segments do not collect data on transfers of disabled students, nor are data collected by student income levels. Independent colleges and universities were not included in the study both because resource constraints made it impossible to visit those campuses, and because historical data on transfers to those institutions are incomplete.

Table 1

Transfer Center Pilot Program Colleges and Community College Grant Amounts

COMMUNITY COLLEGES	ASSOCIATED FOUR-YEAR INSTITUTIONS	CC GRANT AMOUNT
AMERICAN RIVER	UCD CSUS, UOP	*
BAKERSFIELD	UCSB, CSU BAKERSFIELD,USC	$ 90,000
CERRITOS	UCI, CSU FULLERTON, USC	90,000
CITRUS	UCR, CAL POLY POMONA, ASUZA-PACIFIC	62,875
COMPTON	UCLA, CSU DOMINGUEZ HILLS, USC	90,000
COSUMNES RIVER	UCD, CSUS, UOP	*
EAST LOS ANGELES	UCLA, CSULA, USC	90,000
FRESNO CITY COLLEGE	UCB, UCD, UCSC, CSU FRESNO	90,000
IMPERIAL VALLEY	UCSD, SDSU, CAL POLY POMONA, ISIU	89,440
LANEY	UCB, UCD, UCSC, CSU HAYWARD, MILLS, HOLY NAMES	89,650
LOS ANGELES CITY	UCLA, CSULA, USC	86,823
MT. SAN ANTONIO	UCR, UCI, CAL POLY POMONA, UNIV. OF LAVERNE	90,000
PALOMAR	UCSD, SDSU, USIU	60,000
REDWOODS	UCS, CSU HUMBOLDT, UOP	89,646
SACRAMENTO CITY	UCS, CSUS, UOP	*
SAN BERNARDINO VALLEY	UCR, CSU SAN BERNARDINO, UNIV. OF THE REDLANDS, UCB	90,000
CITY COLLEGE OF SF	UCB, SFSU, GOLDEN STATE	90,000
SANTA BARBARA CITY	UCSB, CAL POLY/SLO, WESTMONT	90,000
SANTA MONICA CITY	UCLA, CSU NORTHRIDGE, USC, MARYMOUNT, PEPPERDINE	90,000
SOUTHWESTERN	UCSD, SDSU, NATIONAL UNIV., HOLY NAMES	89,927

*The Los Rios Community College District received an allocation of $115,698.

Table 2

Transfer Center Pilot Program
Grants to Four-Year Universities

UNIVERSITY OF CALIFORNIA	AMOUNT
Berkeley	$75,000
Davis	60,000
Irvine	50,000
Los Angeles	75,000
Riverside	50,000
San Diego	50,000
Santa Barbara	60,000
Santa Cruz	50,000

CALIFORNIA STATE UNIVERSITY	AMOUNT
Bakersfield	$26,000
Fresno	26,000
Fullerton	26,000
Dominguez Hills	26,000
Hayward	26,000
Humboldt	26,000
Los Angeles	52,000
Northridge	26,000
Pomona	52,000
Sacramento	26,000
San Bernardino	26,000
San Diego	52,000
San Luis Obispo	26,000
San Francisco	26,000

Table 3

Average Enrollment and Average Percent
Black and Hispanic Enrollment
SFTC and Other Colleges*

Fall 1987

	Average Enrollment	Average Percent Black and Hispanic
SFTC Colleges	14,424	32%
Other Colleges	10,123	20%
All Colleges	10,935	22%

*Includes credit and non-credit students, for college profile purposes. Transfer rates were calculated on the basis of credit enrollment only (see Section C). Excludes enrollment from six college Centers.

Table 4

Community College Transfers to UC and CSU

Fall 1984

	UC	CSU	Total
SFTC Colleges	1,389	7,542	8,931
Percent	26%	25%	25%
Other Colleges	3,860	22,384	26,244
Percent	74%	75%	75%
All Colleges	5,249	29,926	35,075
Percent	100%	100%	100%

B. PROGRAM IMPLEMENTATION

Participating two- and four-year colleges were responsible for implementing an April 1985 intersegmental plan for the Transfer Center Pilot Program. This plan established a framework for program implementation, and defined the roles and responsibilities of each segment. The evaluation examined the extent to which the plan was successfully implemented and the planned transfer services flowed to their intended clients, particularly underrepresented students. The success of the program depended on how well the plan was implemented by each segment.

1. Implementation at the Community Colleges

The Transfer Center Concept. The Transfer Center concept was that of a physical center on a community college campus, which would serve as the focus of transfer activities. Center staff were to provide direct services to identify, encourage, and assist potential transfer students, particularly ethnic minority, handicapped, low-income and other students who are underrepresented among transfers to four-year institutions. Centers were to strengthen curricular and services coordination and work with existing special programs such as EOPS, but were prohibited from engaging in testing, tutoring or remediation of students. Each Center was to be staffed by a certificated director who would serve as the sole contact for university representatives to the community college.

Four-year colleges and universities were to be responsible for providing direct assistance to students, as well as workshops, campus tours, and other activities. They were required to make sure that services needed by transfer students were provided by other units on their campuses and that articulation agreements were complete.

Transfer Center Clients. In 1986-87 -- midway through the Pilot Program -- the Transfer Centers reported that eight percent of students enrolled in participating community colleges were Transfer Center clients. There were relatively more minority students, full-time students and students enrolled in remedial mathematics or English among Transfer Center clients than among community college students as a whole. Our exploratory telephone survey of recent transfers from three participating community colleges indicated that 80 percent of the respondents had heard of the Transfer Center and 78 percent of those who had heard of the Center had used it. More Hispanic, white and Asian transfers than black transfers reported having heard about the Transfer Center, though black students who had heard of the Center were somewhat more likely to have used its services.

Problems and Successes. Early in the program's implementation, there were problems: the need to integrate the Centers with existing community college student services, (counseling, EOPS and Disabled Student Services); multiple duties assumed by Transfer Center directors (which diluted their Transfer Center effort on some campuses); and a lack of training and administrative experience among some directors. However, the Transfer Centers enjoyed wide administrative support, particularly from top campus administrators, and this support was vital to the resolution of these problems. By the program's third year, most implementation issues had been resolved.

The introduction of a Transfer Center was most smoothly accomplished at colleges which had a strong tradition of transferring students to four-year institution. These colleges had receptive campus environments, where it was relatively easy to attract faculty and some segments of the student body to Transfer Center events. However, the majority of Transfer Centers experienced difficulty in obtaining active ongoing faculty involvement in the program.

Significant progress in articulation was achieved during the Pilot Program among participating colleges. By the end of the program, complete breadth and general education agreements existed among all the Transfer Center community colleges and the UC and CSU campuses they had applied with for program grants. Key transfer majors were completely articulated in all but one case. The Transfer Center program contributed to this progress in articulation by serving as a focal point for raising and resolving disputes in articulation and fostering intersegmental cooperation.

Transfer Center Services. Within each campus setting Transfer Center staff identified a pool of potential transfer students, developed a set of Transfer Center clients and provided services to those clients. These services included tracking the academic progress of potential transfer students, trying to motivate students to transfer, and assisting students in the transfer process.

Three models of Transfer Center service delivery were observed in evaluation fieldwork: a Group Approach, an Individual Approach and a Mixed Approach. Group Approach Transfer Centers served students as a group and did not keep track of their academic progress or individual use of Center services. The twelve colleges that used this approach conducted special outreach efforts to minority underrepresented students to encourage them to consider transfer and to use the Center services. The Group model was found primarily on larger community college campuses.

Individual Approach Transfer Centers, found at four colleges, served clients using a caseload approach, by carefully monitoring individual student academic progress and utilization of Center services. The Individual Model was used primarily by small colleges (fewer than 5,000 students) with high percentages of minority enrollments (40 percent or more).

The Mixed Approach served Asian and white students using the Group Approach and served black and Hispanic students using the Individual Approach. The Mixed model was found at four campuses with over 10,000 students and between 15 to 20 percent minority enrollment.

Both the Individual and Mixed models of Transfer Center service delivery provided individualized assistance to minority underrepresented students. This appeared to be more successful than the Group model for reaching these students and providing them with services.

Summary. The Transfer Center program evolved on most of the community college campuses over the course of the Pilot Program. Though there were problems in the early stages of the program, progress was made in clarifying the roles and responsibilities of Transfer Center directors and integrating the Centers with other student services, and all Centers became fully operational and met state plan goals within the Pilot Program period. Successfully implemented Centers received top level administrative support, were led by personnel with appropriate experience and training, functioned effectively with their four-year counterparts, and were operated by staff who worked hard at outreach to underrepresented students.

Specifically, the evaluation found:

1. All Transfer Centers became fully operational and met state plan goals.
2. Supportive administrative environments aided effective Transfer Center implementation.
    - 2.1 Transfer Centers did not operate efficiently until they had been fully integrated into campus student services units.
    - 2.2. Multiple duties diluted Transfer Center directors' focus on transfer.
    - 2.3. Successful Transfer Center implementation required top level campus administrative support.
    - 2.4. Direct reporting relationships to senior administrators facilitated successful implementation.
    - 2.5. Lack of training and administrative inexperience slowed the efforts of many Transfer Center directors to develop efficient Center operations.
3. Where administrative environments were supportive, Individual and Mixed approaches were most successful in identifying and serving minority underrepresented students.
4. A campus-wide focus on transfer aided Transfer Center implementation.

5. Faculty involvement in the program helped Transfer Centers to meet their goals.
6. The Transfer Centers contributed to progress in articulation among participating colleges.
7. Clear state direction and oversight helped Transfer Center directors understand program objectives and solve problems.
8. Most Transfer Centers learned and changed over the course of the Pilot Program.
9. Some Transfer Center issues were not fully resolved at the conclusion of the Pilot Program.
    - 9.1. Counseling improvements were still needed.
    - 9.2. More work was needed to reach less-motivated students.
    - 9.3. Articulation of majors was not complete.

2. Implementation at Four-Year Institutions

Goals. The goal shared by most community college administrators -- increasing all transfers with an emphasis on minority underrepresented students -- was also the goal of four-year college administrators at ten of the eighteen four-year colleges visited during evaluation fieldwork. Staff at eight four-year colleges expressed a narrower goal of increasing solely black and Hispanic transfers. These staff had a greater sense of urgency toward outreach to minority students than that expressed by their community college counterparts, which led to greater collaborative efforts to locate and motivate minority student transfer candidates.

Activities and Services. Four-year college Transfer Center programs engaged in a wide range of activities and services: application workshops for community college students conducted at community college Transfer Centers; individual academic advisement for community college students; applicant follow-up for students applying to four-year campuses; training for community college staff on current four-year college admissions policies; and articulation agreements and faculty activities in which four-year college faculty met with community college faculty in related disciplines. All the participating four-year colleges visited during the evaluation implemented the workshops and academic advising components of the program, but other program elements were implemented less consistently.

Campus Support for Transfer Center Services. In order to provide the services discussed above, four-year Transfer Center staff needed logistical support from their institutions. They needed articulation major sheets, which explain four-year entrance requirements and prerequisites for majors; admissions data on the status of community college transfer applicants; access to admissions evaluators to assess transfer applicant transcripts; and access to four-year faculty to arrange articulation and other meetings with community college instructors. In all but a few cases, complete logistical support from the four-year institution was present by the end of the Pilot Program (see Tables 5 and 6).[1]

In summary:

1. All participating four-year colleges visited during the evaluation implemented the workshops and academic advising components of the program; other program elements were implemented less consistently.
2. Differences among four-year campuses in the degree of emphasis placed on outreach to black and Hispanic students were associated with differences in the way four-year administrators perceived Transfer Center program goals.
3. Logistical support from four-year institutions was necessary for effective implementation of Transfer Center activities.
4. There were isolated problems in the implementation of the four-year college Transfer Center Program.

3. Intersegmental Cooperation

Intersegmental cooperation among community college and four-year college staff was an essential feature of the state plan for the Transfer Center Pilot Program. The level of cooperation found by the evaluation met and exceeded state expectations, and extended beyond the activities of the Transfer Center program itself. Collaborative outreach to minority students, regional cooperative efforts, and improved relationships between two- and four-year administrators helped to resolve problems related to admissions policies and procedures, articulation, and other matters of importance to the transfer function. Regional clusters of participating institutions emerged, extending beyond the boundaries of the original sets of colleges that applied for program support.

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[1] BW has been informed by CSU segment-level staff that since the evaluation was completed full logistical support has been implemented at all participating CSU campuses.

Table 5

Logistical Support for UC Transfer Centers

	Number of Campuses			
	1986-87		1987-88	
Support	Present	Absent	Present	Absent
Articulation Major Sheets	3	1	7	0
Access to Admissions Data	3	1	7	0
Access to Admissions Evaluator	1	3	7	0
Faculty Availability	2	2	3	4

Table 6

Logistical Support for CSU Transfer Centers

	Number of Campuses			
	1986-87		1987-88	
Support	Present	Absent	Present	Absent
Articulation Major Sheets	5	2	9	2
Access to Admissions Data	4	3	10	1
Access to Admissions Evaluator	5	2	9	2
Faculty Availability	6	1	10	1

C. PROGRAM EFFECTIVENESS

The evaluation collected data on the number of transfers in fall and spring to UC and CSU campuses (see Table 7). In order to assess program effectiveness, the evaluation calculated transfer rates and compared them for state funded Transfer Center (SFTC) and other community colleges before and after the introduction of the Pilot Program. The "pre-program" transfer rate was defined as the number of transfers in 1982, 1983 and 1984 divided by the community college credit enrollment in those years. The "post-program" transfer rate was defined as the number of transfers in 1987 (when the Pilot Program was most fully implemented) divided by the average credit enrollment in 1985, 1986, and 1987.

1. Transfers to UC

SFTC colleges showed growth in their average fall transfer rate to UC, while other colleges showed a slight decline (see Table 8). However, the SFTC colleges had a higher percentage of full-time credit students and a lower percentage of white students than did other colleges. Analysis showed that these differences affect transfer rates. Therefore, the raw average transfer rates for SFTC and other colleges were adjusted statistically, with the result that the SFTC colleges' UC adjusted transfer rates increased following program implementation, while the UC transfer rates for other colleges remained constant. We conclude that the Pilot Program colleges showed a significant increase in UC fall transfer rates, even after taking into account broad trends affecting all community colleges and specific differences among colleges that affect transfer rates.

Specifically:

- State funded Transfer Center colleges are estimated to have increased their fall UC transfer rate by approximately 30 percent, while other colleges showed no average increase.
- The number of fall UC transfers from SFTC colleges is estimated to be approximately 400 more than it might have been without the program.
- If the program had been implemented statewide, there might have been an estimated 1,200 additional community college fall transfers to UC -- an increase of approximately 25 percent.

Table 7

Transfers to UC and CSU

1982-83 - 1987-88

	UC*		CSU**	
	SFTC Colleges	Other CCs	SFTC Colleges	Other CCs
1982-83	1306	3824	11,895	33,299
1983-84	1308	3910	11,843	33,891
1984-85	1401	3855	11,712	33,698
1985-86	1395	3534	11,839	33,528
1986-87	1270	3588	11,184	32,432
1987-88	1617	3847	11,697	33,003

*Fall only. Data on winter/spring transfers to UC are not available for years prior to 1986-87, and were not used in transfer rate calculations. Source: CPEC, Update of Community College Transfer Student Statistics, Fall 1987, Report 88-15 (Sacramento: March 1988).

**Full school year transfers. Source: CPEC, *Ibid.*, and Update of Community College Transfer Student Statistics, 1988-89, Report 89-23 (Sacramento: August 1989), corrected by data provided by CSU.

Table 8

Raw Average Transfer Rates to UC (Fall)

Transfers Per 1,000 Credit Enrollees

	Pre-Implementation Period	Post-Implementation Period
SFTC Colleges	4.8	5.9
Other Colleges	4.2	4.0

Though the data are not conclusive, they indicate that transfer rates to UC increased for Asian and Hispanic students from Pilot Program colleges. Specifically:

- The data suggest that the Pilot Program had its greatest effect at UC on Asians, followed by Hispanics. There may have been a slight gain for white students, whereas the data do not reveal any improvement in the black transfer rate.
- At colleges that were not in the Pilot Program, Asian and white transfer rates to UC appeared to decline, which strengthens our confidence in the conclusion that the Pilot Program colleges did relatively better for these ethnic groups. For black students, the transfer rate showed little change for either SFTC or other colleges.

2. Transfers to CSU

The statistical evidence suggests a slight increase in the rate of transfers of students from SFTC colleges to CSU after implementation of the Pilot Program. Over the same time period, the transfer rate for non-SFTC colleges showed virtually no change, as Table 9 indicates.

Table 9

Raw Average Transfer Rates to CSU (Full Year)

Transfers Per 1,000 Credit Enrollees

	Pre-Implementation Period	Post-Implementation Period
SFTC Colleges	42.0	44.0
Other Colleges	38.8	37.8

Given the large number of students at CSU campuses, this slight increase in transfer rate translates into large numbers:

- The number of full year CSU transfers from SFTC colleges is estimated to be approximately 500 more than it might have been without the program.
- If the program had been implemented statewide, there might have been an estimated 3,300 additional community college full year transfers to CSU -- an increase of approximately seven percent.

The data reveal no significant difference between pre- and post-implementation transfer rates for different major ethnic groups, for either SFTC or other colleges.[3] While there may be some small differences, the data are too statistically uncertain to support further conclusions.

D. CONCLUDING ASSESSMENT

The accomplishments of the Transfer Center Pilot Program need to be assessed against the goals and expectations of the April 1985 intersegmental plan. In terms of this plan, the Pilot Program has clearly fulfilled its objectives -- the Transfer Centers are fully operational and there is general cooperation among the segments that exceeds original expectations. The Transfer Centers have learned much since their inception and should continue to learn how to improve. On some community college campuses, Transfer Centers appeared to be contributing to broader institutional changes, such as a stronger campus-wide focus on transfer. It is too early to assess these potentially important secondary effects of the Pilot Program.

Insofar as their effectiveness can be assessed, the data indicate that SFTC colleges had a significant increase in their overall fall transfer rate to UC, and a slight increase in their overall full year transfer rate to CSU. Over the same period, the overall transfer rates to both UC and CSU from non-SFTC colleges remained virtually unchanged. Fall transfer rates for Asian, white and Hispanic students increased at UC for SFTC colleges. Quantitative and fieldwork evidence reveal that the Transfer Centers focused heavily on full-time students who were interested in transferring to four-year institutions.

From the standpoint of statistical analysis, the quantitative evidence does not allow us to draw cause and effect conclusions about the Pilot Program. The data cannot tell us conclusively whether increases in transfer rates were caused by the Transfer Centers per se or were more attributable to other activities and decisions of the participating two-and four-year institutions -- or to other factors altogether. However, the fieldwork revealed that the intentions of these institutions were usually focused or executed through the Transfer Centers and the mechanisms of cooperation that were established for the Pilot Program. These findings, when considered with the quantitative evidence on program impact, indicate that the Transfer Centers played a vital role in the broader picture of improving transfers.

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[3] The ethnic composition of transfers to CSU was not available for summer, winter or spring transfers; the transfer rate for different ethnic groups was calculated on the basis of fall transfers only.

E. RECOMMENDATIONS

The evaluation was charged by the Office of the Chancellor and INTER-ACT with recommending to the Legislature and the Governor whether Transfer Centers should continue to be funded, and recommending to the segments how the Centers could be improved. The following recommendations are responsive to these directives. Part 1 of the recommendations addresses the issue of program continuation and expansion; Part 2 provides advice on program improvement.

1. Program Continuation and Expansion

Recommendation 1: **Continue and expand the Transfer Center program.**

> **The state should continue to fund Transfer Centers at the two- and four-year colleges that participated in the Pilot Program. The Transfer Center program should also be expanded to other colleges, and state funding should be provided to support that expansion.**

With the Transfer Center program, the state had hoped to create one means among many for eliminating obstacles to transfer, particularly for underrepresented students. The preponderance of evaluation evidence indicates that this effort has succeeded, and should therefore continue to be funded at the Pilot Program colleges. Expansion of the Transfer Center program holds the promise of extending this success to other colleges throughout the state.

Recommendation 2: **Phase in program expansion.**

> **The state should phase in new Transfer Center sites, and funding for these sites, over a period of three to five years.**

A phased-in expansion should bring a new group of 15-30 community colleges into the Transfer Center program each year for three to five years. The evaluation revealed that the Pilot Program suffered at first from a number of implementation problems, some of which were not fully resolved until the third year of the program. This is common for new programs, and while some problems may be avoidable in light of Pilot Program experience, it is prudent to assume that new Transfer Centers will have implementation difficulties -- and adaptations -- of their own. Thus, as each new group of colleges joins the program, new ideas and new implementation lessons would become available to succeeding groups. The 3-5 year phase-in period would give state and local program managers the time they need to absorb and apply this growing fund of ideas and experience, so that the program can be continuously strengthened as it grows.

Recommendation 3: **Give under-served regions high priority in program expansion.**

> **The first phase of Transfer Center expansion should concentrate on funding new Transfer Centers in regions that were not well represented in the Pilot Program.**

The evaluation confirmed that transfer is essentially a regional phenomenon, in that most transfer students enroll at four-year institutions in the vicinity of their community college. Because there were too few colleges in the Pilot Program to cover all regions of the state, some regions (e.g., parts of the Bay Area) have no state funded Transfer Centers; other regions with many community colleges had only one or two colleges in the Pilot Program. To insure the equitable distribution of the program statewide, these under-served regions should have high priority for the first phase of program expansion. This criterion for expansion, however, should not take precedence over criteria designed to insure high quality programs.

Recommendation 4: **Maintain state oversight of the program.**

> **As the Transfer Center program expands, the CCC Chancellor's Office, the systemwide offices of UC and CSU, and INTER-ACT should maintain a level of program oversight comparable to that exercised during the Pilot Program.**

As noted above in the discussion of *Recommendation 2,* the CCC Chancellor's Office four-year systemwide staff and INTER-ACT provided program oversight that helped to resolve a number of implementation problems. The CCC Chancellor's Office staff in particular maintained a high level of contact with the community college campuses, provided feedback on issues identified in the course of these visits, and worked with Transfer Center and other college staff to develop strategies for improvement. The Chancellor's Office also facilitated information sharing among Transfer Center staff around the state, which was highly valued by both two- and four-year participants. This level of oversight should be maintained as the program expands, so that new participants have access to the same amount of state direction and assistance as did the Pilot Program colleges. If necessary, additional segment level staff should be assigned to the program for this purpose.

Recommendation 5: **Increase funding at four-year colleges to accommodate expansion.**

> **As new community college Transfer Centers are funded, Transfer Center programs at associated four-year institutions should be given additional funding where necessary, to insure their capacity to work with additional community college campuses.**

The evaluation found that successful implementation of a Transfer Center program reflected high levels of effort at both two- and four-year colleges. As new community college Transfer Centers are funded, they will in most cases be associated with four-year institutions that are already working with Pilot Program Centers; over the course of program expansion, some four-year campuses may be asked to work with many additional state funded Transfer Centers. As the program expands, the state should, where necessary, provide additional funds to four-year campus programs in proportion to the expansion, so they can maintain their current levels of effort (see also *Recommendation 10*).

2. Program Improvement

Recommendation 6: **Incorporate successful components into the Transfer Center model.**

> **In developing criteria for new Transfer Center grant awards, the state should encourage applicants to include key components that have proved successful in the Pilot Program.**

The evaluation identified a number of program components that contributed to successful Transfer Centers. At community colleges, these components included:

- Emphasizing individualized approaches to service delivery;
- Hiring full-time certificated staff members with appropriate experience and training as Center directors;
- Relieving directors of duties away from the Center;
- Arranging for Center directors to report directly to senior administrators;
- Having senior administrators assume responsibility for insuring the integration of Transfer Centers with other student services.

At four-year institutions, successful programs provided essential logistical support to Transfer Center coordinators, and engaged in a wide range of activities identified by the evaluation. In specifying criteria for program expansion grants, the state should encourage applicants to develop their Transfer Center proposals with these findings in mind, though they should be free to adapt these program features to meet their own needs.

Recommendation 7: **Intensify efforts to serve underrepresented ethnic minority students.**

> **Revised program guidelines should require community and four-year colleges to identify and implement specific strategies for reaching underrepresented ethnic minority students, motivating them to consider transfer, and providing them with needed services.**

The evaluation showed that more work is needed to help underrepresented ethnic minority students. The state should require two- and four-year applicants for new or renewed program funding to identify strategies for working with underrepresented ethnic minority students, and make firm commitments to implementing these strategies. The state should also disseminate information on promising approaches employed during the Pilot Program, including individual and mixed approach service models and models of cooperative intersegmental outreach.

Recommendation 8: **Develop strategies to serve students with low tendency to transfer.**

> **Revised program guidelines should require community and four-year colleges to collaborate on devising and implementing strategies to identify, motivate and serve students who have traditionally not been expected to transfer.**

The evaluation showed that Transfer Centers were most successful in serving full-time students who were interested in continuing their college educations. In order to serve other types of students, greater efforts will be needed to identify and motivate students who have historically been much less likely to transfer. To this end, the state should require two- and four-year applicants for new or renewed program funding to identify how they will develop cooperative intra-institutional and intersegmental strategies for serving potentially qualified students with low motivation or aspirations, part-time and evening students, and other students with low propensities to transfer. (Some, but not all, ethnic minority underrepresented students are in this category.) Applicants should be encouraged to propose strategies they feel will have high payoff, and to provide appropriate rationales in support of their proposals. The state should sponsor regional and state conferences focusing on this issue, to include representatives from the segments, community and civil rights groups, and secondary school educators.

Recommendation 9: **Clarify expectations and accountability for four-year institutions.**

> **The intersegmental Transfer Center plan should be modified to include a more specific set of expectations for four-year campus Transfer Center programs. Program goals, components, staffing, and logistical support should be specified.**

The April 1985 intersegmental plan for Transfer Centers contains little direction for four-year college Transfer Center programs. These programs consistently implemented two components (academic advising and workshops) and less consistently implemented three components (applicant follow up, training community college staff and faculty activities). As the Pilot Program evolved, the logistical support needed from four-year campuses became more widely available to their Transfer Center coordinators, and other improvements were implemented, but four-year campus administrator goals for the program remained more diverse -- and less consistent with state plan goals -- than those of community college administrators. To strengthen the program at four-year colleges as it expands to more community colleges (and to additional CSU campuses) the state should take advantage of what has been learned during the Pilot Program to clarify expectations and accountability for four-year Transfer Center programs. The state plan should more specifically define program goals, as well as desirable program components, staffing, and logistical support.

Recommendation 10: **Insure adequate staffing levels at four-year institutions.**

> **The state plan should specify that a full-time coordinator plus necessary support staff is the minimum level of effort required for four-year campus Transfer Center program staffing. State program funding should support this requirement.**

Transfer Center programs require a high level of effort from each participating four-year campus. The evaluation found that the most successful staffing pattern at four-

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AN EVALUATION OF
THE TRANSFER CENTER PILOT PROGRAM

EVALUATION FINDINGS

Berman, Weiler Associates
August 1989

Prepared for
The Intersegmental Advisory Committee on Transfer

AN EVALUATION OF
THE TRANSFER CENTER PILOT PROGRAM

Volume 2

FINDINGS

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PREFACE

This report presents the findings of a three-year evaluation of the Transfer Center Pilot Program, an intersegmental effort aimed at improving community college transfer rates, particularly among black, Hispanic, Native American, low-income and disabled students.

The genesis of the Pilot Program was a concern among state policymakers, higher education officials and civil rights groups that community college transfer rates were too low, particularly among minority, disabled, and other students who were underrepresented among transfers to four-year institutions. Following intersegmental development of a Transfer Center plan, the program was funded by the state legislature in the Budget Act of 1985, and initiated in 1985-86 at twenty community colleges, eight UC and fourteen CSU campuses, and thirteen independent colleges and universities. The intersegmental plan called for an independent evaluation of the program to assess the effectiveness of Transfer Centers, recommend ways in which they could be improved, and recommend to the Legislature and the Governor whether Transfer Centers should continue to be funded.

A contract was awarded to BW Associates in August 1986 to evaluate the Pilot Program. The evaluation was conducted under contract to the Office of The Chancellor, California Community Colleges, and has reported to the Office of the Chancellor and to INTER-ACT, an intersegmental advisory committee.

Volume 1 of this report, Executive Summary and Recommendations, presents an overview of the findings and recommendations pertaining to program continuation, expansion, and improvement. Volume 3 is Appendix D, which provides statistical data and information on statistical methods used for the analysis of program effectiveness.

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Many individuals provided direct assistance and invaluable advice to the study team conducting the evaluation. At the Chancellor's Office, California Community Colleges, Dr. Judy C. Miner was responsible for administering the Pilot Program and monitoring the evaluation contract from May 1986 to August 1988, after which Dr. Connie Anderson fulfilled these duties. Both provided knowledgeable direction and advice, and much appreciated encouragement and support. Other Chancellor's Office staff who provided very useful assistance include Milt Shimabukuru, Kathleen Nelson, Bill Hamre, Buster Sano, Jerry Hudson and Chuck McIntyre.

We would also like to thank the segmental representatives on INTER-ACT, who were very supportive of our numerous requests for assistance, data and information. UC representatives Ed Apodaca and Margaret Heisel, CSU representatives Stephanie McGraw, Vivian Franco and Ralph Bigelow, and independent college representatives Joan Nay and Hans Giesecke were particularly helpful.

Campus faculty and administrators at participating community colleges, CSU and UC campuses who cooperated with the evaluation are too numerous to name. Their assistance was instrumental in making arrangements for fieldwork visits, and they were most generous in setting aside time for interviews and providing documentary materials.

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I. INTRODUCTION

This section provides an overview of the problem addressed by the Transfer Center Pilot Program -- the need to increase the number of community college students, particularly those from underrepresented groups, who transfer to four-year institutions. The origins and design of the program are described, a profile of participating and non-participating colleges is provided, and the evaluation questions, approach and methodology are summarized.

A. THE PROBLEM

A primary mission of California's community college system is to prepare students to transfer to four-year institutions of higher education. Both the 1960 Master Plan and, more recently, the Commission for the Review of the Master Plan, have emphasized the role of the community colleges as providers of lower division studies for students who would eventually attend four-year colleges or universities. BW Associates examined the transfer function in a 1985 study of the community colleges, and found that transfer rates declined in the 1970s and early 1980s, a decline that paralleled a decline in the number and proportion of full-time students attending community colleges.[1] The Commission for the Review of the Master Plan found that "Since 1960, growth in Community College enrollments has been matched by dramatic differences in the student population. Today, the Community College student clientele is, on average, considerably older, more ethnic minority, lower income, less well-prepared academically, attends primarily on a part-time basis while working, and more job-oriented."[2]

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[1] Berman, Weiler Associates, A Study of California's Community Colleges (Berkeley: 1985, R-108, 3 volumes).

The opportunity provided by the community colleges to transfer to four-year institutions remains the major path for many minority youth to realize their hopes and aspirations. At the time of entry into community college, black and Hispanic high school graduates have already had to overcome enormous odds: Forty-eight percent of black students and 45 percent of Hispanic students drop out before reaching high school graduation.[3] Yet only a relatively low proportion of such students who enter the community colleges have succeeded in transferring to four-year colleges and universities. In fall 1982, for example, black students were 8.6 percent of full-time community college enrollment, but were 3.8 percent of all 1982-83 transfers to UC and 5.9 percent of all transfers to CSU. In the same year, Hispanic students were 11.1 percent of full-time enrollment but 8.3 percent of all transfers to UC and 9.1 percent of all transfers to CSU. (By contrast, white students were 60.7 percent of fall 1982 full-time enrollment, but comprised 74.8 percent of all 1982-83 transfers to UC and 73.7 percent of all transfers to CSU.) More recent data show little change in these minority student transfer rates. In fall 1987, black students were 8.3 percent of full-time community college enrollment, but only 3.6 percent of all 1987-88 transfers to UC and 5.7 percent of all transfers to CSU. Hispanic students were 14.7 percent of full-time community college enrollment but 10.4 percent of all transfers to UC and 11.2 percent of all transfers to CSU. Whites made up 58.7 percent of fall 1987 full-time community college enrollment; they were 68.7 percent of UC transfers and 69 percent of CSU transfers in 1987-88. Asians were 11.7 percent of full-time community college students in fall 1987 and 14 percent of UC transfers and 10.6 percent of CSU transfers in 1987-88.[4]

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[2] Commission for the Review of the Master Plan, Background Papers on the Challenge of Change (Sacramento: March 1986).

[3] The Achievement Council, Unfinished Business (Oakland: May 1988, p. 14).

Historically, then, proportionately only about half as many black students as white students have transferred to UC and CSU, and about two-thirds as many Hispanic as white students have transferred to these institutions.

These inequalities may get worse as black and Hispanic student populations grow over the coming years. In 1980, these two ethnic groups combined were about one-fourth of the California population; by the year 2000 they are expected to make up more than one-third of the state's residents. "Tomorrow, the demographics indicate that the community Colleges will be serving even larger proportions of ethnic minorities, limited- or non-English speaking students,

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[4] California Postsecondary Education Commission, Update of Community College Transfer Student Statistics, Fall 1987 (Sacramento: March 1988, Report 88-15), and California Community Colleges, Report on Enrollment Fall 1987 (Sacramento: July 1988).

students who need remediation, and older, part-time students."[5]

The major barriers for community college students wishing to transfer to four-year institutions have been identified as: (1) inadequate articulation of courses and programs among community colleges and four-year colleges and universities, (2) inadequate information and counseling given to community college students on four-year college requirements and admissions policies, (3) absence of a clear transfer core curriculum at community colleges, (4) financial pressure on minority students, combined with inadequate information available to community college students on financial aid at four-year colleges and universities.[6] Prior to the establishment of the Transfer Center program, many community colleges and four-year institutions initiated special efforts designed to enhance the transfer rate of students, particularly black and Hispanic students. Five of the community colleges that received Transfer Center grants had earlier received grants from the Ford Foundation to operate Urban Community College Transfer Opportunity Projects, which included student recruitment efforts, honors programs, special counseling, student support groups, workshops, peer advisors, faculty mentors and a number of other approaches to improving minority transfer opportunities.[7] A number of collaborative efforts among four-year universities and community colleges have been established in California. For example, the UC-Santa Barbara - Santa Barbara City College Transition Program was jointly funded by the two colleges beginning in 1982. The Transition Program has provided special outreach and support services to potential transfer students.

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[5] California Postsecondary Education Commission, Update of Community College Transfer Student Statistics, Fall 1987 (Sacramento: March 1988, Report 88-15), and California Community Colleges, Report on Enrollment Fall 1987 (Sacramento: July 1988).

[6] California Postsecondary Education Commission, Reaffirming California's Commitment to Transfer (Sacramento: March 1985, Report 85-15); Mexican American Legal Defense and Education Fund, "Petition to Increase Minority Transfer From Community College to State Four Year Schools" (MALDEF v. Board of Governors, et. al.,no date); Commission for the Review of the Master Plan, Background Papers on the Challenge of Change.

An independent survey conducted by the Field Research Corporation showed that black and Hispanic students aspire as much as other ethnic groups to transfer to the university level (California Community Colleges, Field Research Corporation Study. Sacramento: October 1984).

The Master Plan Commission's Final Report called for a transfer core curriculum at community colleges as one step to invigorate the transfer function.[8] A 31-unit transfer core curriculum was adopted in November 1987 by the Intersegmental Academic Senates of the University of California, California State University and Community Colleges. While not yet fully implemented, this step was designed to bring California higher education closer to the goal of a common transfer core curriculum.[9]

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[7] California Postsecondary Education Commission, Views From the Field on Community College Transfer (Sacramento: 1984).

[8] Commission for the Review of the Master Plan for Higher Education, The Master Plan Renewed (Sacramento: July 1987). The legislature's Joint Committee for Review of the Master Plan for Higher Education has endorsed the core curriculum concept. (Joint Committee, California Faces California's Future: Education for Citizenship in a Multicultural Democracy. Sacramento: March 1989)

[9] Interview with Karen Sue Gross, President of the Academic Senate of the California Community Colleges.

B. THE TRANSFER CENTER PILOT PROGRAM

1. The State Plan

In the context of heightened awareness of the need to invigorate the transfer function in general, and the acute need to increase the transfer rates of underrepresented students in particular, the Transfer Center Pilot Program was proposed as an intersegmental effort to meet these goals. (Underrepresented students were defined in the Transfer Center plan as black, Hispanic, and Native American students, as well as low-income and disabled students.)

It was widely recognized that the causes of low transfer rates among underrepresented students were complex, were not likely to be resolved by any single policy intervention, and were only partially susceptible to actions that might be taken by the higher education segments. At the same time, many observers felt that the two- and four-year colleges acting together could address many known obstacles to transfer, in particular the wide dispersion and low visibility of transfer-related student support services on community college campuses; the difficulty faced by many students in obtaining timely, accurate information about opportunities to transfer; weak efforts to identify, motivate and assist underrepresented students most in need of such help; incomplete, non-existent, or outdated course articulation agreements between community colleges and four-year institutions; and wide variation in the quality and depth of intersegmental cooperation on transfer issues.

The concept of Transfer Centers located at every community college was identified in the early 1980s by segments of higher education, state officials, local decisionmakers and civil rights groups as one promising means for strengthening the community college transfer function. The University of California proposed the creation of Transfer Centers in late 1984, and the Governor's Budget for 1985-86 provided funding for a new Transfer Center Pilot Program of up to 20 Transfer Centers.

A plan for Transfer Center implementation was prepared by the four segments of higher education in April, 1985. The plan set forth a model for the Transfer Center concept, specified roles for the community colleges and four-year colleges and universities, and suggested mechanisms for state level intersegmental coordination. It also called for an independent evaluation of the implementation and impact of the program.

The Transfer Center concept was that of a physical center, located on a community college campus, which would serve as the focus of transfer activities. Center staff were to provide direct services to identify, encourage, and assist potential transfer students, "particularly minority, handicapped, low-income and other students who are underrepresented among transfer students."[10] The

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[10] California Community Colleges, University of California, California State University, "A Plan for Implementing the Transfer Center Pilot Program" (Sacramento: April 1985, p. A-3).

Center was to provide services to help potential transfer students prepare for upper-division work, including academic planning and the use of articulation agreements to insure that community college course work would be accepted for transfer. Center services were to include keeping track of the progress of potential transfer students, making sure they received needed services. Centers were to strengthen curricular and services coordination, and work with existing special programs such as EOPS. The Centers were specifically prohibited from engaging in testing, tutoring or remediation of students. Each Center was to be staffed by a certificated director who would serve as the sole contact for university representatives to the community college.

Four-year colleges and universities were to be responsible for providing workshops and individual assistance to students, conducting tours of their campuses, and helping to organize inter-institutional meetings among faculty and staff. They were required to make sure that services needed by transfer students were provided by other units on their campuses, were asked to designate a contact person for the program, and were to insure that articulation was complete for breadth, general education and major field requirements.[11]

Each community college participating in the program was required to provide the Center with space, administrative support, and an advisory committee. Community college administrators were required to coordinate student services with the Transfer Center.

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[11] These concepts are discussed in more detail in Chapter II.

At the state level, each segment was to designate a systemwide coordinator for the program who would manage the segment's state-level oversight of the Transfer Centers as well as help resolve problems which might arise between segments. The Chancellor of the Community Colleges was given the role of coordinating the program.

An intersegmental committee called INTER-ACT was created by the plan, and its composition was specified. Each segment was to have three representatives (including the systemwide coordinator and a faculty member), two transfer center directors, and the coordinator of the computerized articulation system ASSIST. Three ex-officio members of INTER-ACT were to include two representatives from the Association of Independent Colleges and Universities and one representative from CPEC.

The plan called for an independent evaluation of the quality of Pilot Program implementation and the impact of the program on transfer rates. The evaluation was also to identify successful components of the Transfer Centers and provide formative recommendations for program improvement.

The plan developed for the Transfer Centers in April 1985 assumed that the effort would be intersegmental at all levels: at the state level among the segmental offices, at the campus level between the top level administrators of participating campuses, and at the Transfer Centers, where staff from two or more institutions would cooperatively deliver services to students. Articulation was central to the Transfer Center role and function. While the plan called for the strengthening of articulation, it was silent on whether Transfer Centers themselves should be charged with responsibility for developing articulation agreements. The plan called for the integration of the Transfer Centers with student services for special populations, such as Student Affirmative Action and EOPS, and for general integration on the community college campus among services for students, but was ambiguous as to whether Transfer Centers should assume the role of transfer counseling for students. At the same time, the plan's description of the role of four-year Transfer Center staff included a specific reference to counseling individual students. Thus, the plan created a potential overlap in roles between community college counselors and four-year representatives in advising potential transfer students.

2. Pilot Project Awards

An RFP was developed by INTER-ACT for Transfer Center grants, and 65 community colleges applied, each in conjunction with a CSU, UC and independent college or university. Twenty community college campuses were selected on the basis of the quality of their proposals, history of past transfer efforts, commitment to the project, and percentage of minority students. The intersegmental committee also selected colleges that would be representative of the regions in the state. Tables I-1 and I-2 show the colleges selected and their grant amounts from the state funded Transfer Center (SFTC) program.

Table I-1

State Funded Transfer Center (SFTC) Colleges and Community College Grant Amounts

COMMUNITY COLLEGES	ASSOCIATED FOUR-YEAR INSTITUTIONS	CC GRANT AMOUNT
AMERICAN RIVER	UCD, CSUS, UOP	*
BAKERSFIELD	UCSB, CSC BAKERSFIELD,USC	$90,000
CERRITOS	UCI, CSU FULLERTON, USC	90,000
CITRUS	UCR, CAL POLY POMONA, ASUZA-PACIFIC	62,875
COMPTON	UCLA, CSU DOMINGUEZ HILLS, USC	90,000
COSUMNES RIVER	UCD, CSUS, UOP	*
EAST LOS ANGELES	UCLA, CSULA, USC	90,000
FRESNO CITY COLLEGE	UCB, UCD, UCSC, CSU FRESNO	90,000
IMPERIAL VALLEY	UCSD, SDSU, CAL POLY POMONA, ISIU	89,440
LANEY	UCB, UCD, UCSC, CSU HAYWARD, MILLS, HOLY NAMES	89,650
LOS ANGELES CITY	UCLA, CSULA, USC	86,823
MT. SAN ANTONIO	UCR, UCI, CAL POLY POMONA, UNIV. OF LAVERNE	90,000
PALOMAR	UCSD, SDSU, USIU	60,000
REDWOODS	UCS, CSU HUMBOLDT, UOP	89,646
SACRAMENTO CITY	UCS, CSUS, UOP	*
SAN BERNARDINO VALLEY	UCR, CSU SAN BERNARDINO, UNIV. OF THE REDLANDS, UCB	90,000
CITY COLLEGE OF SF	UCB, SFSU, GOLDEN STATE	90,000
SANTA BARBARA CITY	UCSB, CAL POLY/SLO, WESTMONT	90,000
SANTA MONICA CITY	UCLA, CSU NORTHRIDGE, USC, MARYMOUNT, PEPPERDINE	90,000
SOUTHWESTERN	UCSD, SDSU, NATIONAL UNIV., HOLY NAMES	89,927

*The Los Rios Community College District received an allocation of $115,698.

Table I-2

Transfer Center Pilot Program Grants to Four-Year Universities

UNIVERSITY OF CALIFORNIA	AMOUNT
Berkeley	$75,000
Davis	60,000
Irvine	50,000
Los Angeles	75,000
Riverside	50,000
San Diego	50,000
Santa Barbara	60,000
Santa Cruz	50,000

CALIFORNIA STATE UNIVERSITY	AMOUNT
Bakersfield	$26,000
Fresno	26,000
Fullerton	26,000
Dominguez Hills	26,000
Hayward	26,000
Humboldt	26,000
Los Angeles	52,000
Northridge	26,000
Pomona	52,000
Sacramento	26,000
San Bernardino	26,000
San Diego	52,000
San Luis Obispo	26,000
San Francisco	26,000

Each community college grant was sufficient to fund a certificated director position, a clerical staff member, and some operational costs, such as supplies and travel. UC allocated funds to each of its eight general campuses in relation to the numbers of transfer applicants the campuses usually had; campuses with historically high numbers of applicants received larger grant amounts. CSU distributed funds to its 14 campuses in the program by allocating $52,000 to each of three campuses that were funded to serve two community college Transfer Center grantees, and $26,000 to the campuses that were funded to serve a single grantee.[12]

3. Profile of Transfer Center Campuses

The locations of the Transfer Center campuses and the metropolitan status of their communities are shown in Tables I-3 and I-4.

Tables I-5 and I-6 show the size and ethnic composition of community colleges, with state funded Transfer Centers compared to colleges that did not participate in the program. Table I-5 shows that Transfer Center colleges tend to be in the medium range of college size -- between 10,000 and 15,000 students. Thirty-five percent of Transfer Center colleges are in this size range compared to 19 percent of non-Transfer Center colleges. Also, 58 percent of all non-Transfer Center colleges, but only one-fourth of Transfer Center colleges, enroll less than 10,000 students.

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[12] Interviews with segmental coordinators, Transfer Center program.

Table I-6 shows that, on average, there are higher proportions of black and Hispanic students enrolled at the Transfer Center colleges than at colleges that did not participate in the program. Whereas almost half (48 percent) of all colleges without Transfer Center state grants have fewer than 15 percent black and Hispanic students, only 15 percent of the Transfer Center colleges are in this group. And one of five Transfer Center colleges has more than 50 percent black and Hispanic enrollment, compared to one in twenty colleges without Transfer Center grants. Table I-7 shows the average total enrollment and percent black and Hispanic enrollment of Transfer Center and other colleges.

In fall 1984, the year prior to commencement of the Transfer Center Pilot Program, Transfer Center colleges enrolled 25 percent of all community college credit students and accounted for 25 percent of fall 1984 transfers to UC and CSU combined. Table I-8 shows the relative share of transfers originating from Transfer Center and non-Transfer Center colleges in the year preceding the Pilot Program.

To summarize, the 20 community colleges selected to participate in the Transfer Center Pilot Program were widely distributed geographically (in northern, central, and southern California) and in various types of communities (urban, rural and suburban). On average, the Transfer Center colleges were more likely to be in the medium size range of community colleges and

Table I-3

Location of Pilot Program Campuses

	Number of Colleges
Bay Area, Northern California	6
Central Valley	2
Southern California	11

Table I-4

Metropolitan Status of Pilot Program Campus Communities

	Number of Colleges
Urban	7
Suburban	10
Rural	2

Table I-5

College Size -- SFTC and Other Colleges*

Fall 1987 Enrollment

Enrollment Range	SFTC Colleges Number	SFTC Colleges Percent	Other Colleges Number	Other Colleges Percent
Less than 5,000	2	10%	22	26%
5,001 - 10,000	3	15%	28	32%
10,001 - 15,000	7	35%	16	19%
15,001 and above	8	20%	20	23%
Total	20	100%	86	100%

*Based on credit and non-credit enrollment, for college profile purposes. Transfer rates were calculated on the basis of credit enrollment only (see Chapter IV). Does not count enrollment from six college Centers.

Table I-6

Black and Hispanic Student Enrollment SFTC and Other Colleges*

Fall 1987

Hispanic and Black Students Percent of Total Enrollment	SFTC Colleges		Other Colleges	
	Number	Percent	Number	Percent
0-15%	3	15%	41	48%
16-30%	8	40%	26	31%
31-50%	5	25%	14	6%
51-75%	3	15%	4	4%
75% and above	1	5%	1	1%
Total	20	100%	86	100%

*Based on credit and non-credit enrollment. Excludes enrollment from six college Centers.

Table I-7

Average Enrollment and Average Percent Black and Hispanic Enrollment SFTC and Other Colleges*

Fall 1987

	Average Enrollment	Average Percent Black and Hispanic
SFTC Colleges	14,424	32%
Other Colleges	10,123	20%
All Colleges	10,935	22%

*Based on credit and non-credit enrollment, for college profile purposes. Transfer rates were calculated on the basis of credit enrollment only (see Chapter IV). Does not count enrollment from six college Centers.

Table I-8

Community College Transfers to UC and CSU

Fall 1984

	UC	CSU	Total
SFTC Colleges	1,389	7,542	8,931
Percent	26%	25%	25%
Other Colleges	3,860	22,384	26,244
Percent	74%	75%	75%
All Colleges	5,249	29,926	35,075
Percent	100%	100%	100%

enroll a higher percentage of black and Hispanic students than community colleges statewide. Their share of total transfers to UC and CSU the year before the Pilot Program began was proportional to their share of total community college enrollment.

C. OVERVIEW OF THE EVALUATION

The intersegmental plan for the Transfer Center called for an independent evaluation of the program which would assess the program's implementation and impact on transfers, and provide advice on how the program could be improved. This section summarizes the evaluation approach to assessing the success of program implementation and the effectiveness of the program in increasing transfers.

1. Evaluation Questions

The independent evaluation of the Transfer Center Program was called upon to answer four questions. First, was the Transfer Center Program implemented successfully by participating community colleges and public four-year colleges and universities? The degree and quality of program implementation was to be evaluated.

Second, what was the impact of the Transfer Center program on transfer activity? Did the program meet its objective of increasing the transfer rate of all students, particularly underrepresented community college students?

Based on the answers to the first two questions, the evaluation was asked to answer two additional questions:

(1) Should the Transfer Center program be continued and expanded to other colleges in California? (2) If it should be continued, how could it be improved?

2. Evaluation Approach

Two types of analyses were planned in order to address evaluation questions. An implementation analysis, utilizing fieldwork visits to participating sites, documentary data collection and telephone interviews, was planned in order to assess the degree and quality of program implementation, and contribute to evaluation recommendations regarding program improvement. A program effectiveness analysis, focusing on statistical analyses of data on student transfers, was planned to help answer evaluation questions about program impact.

a. Implementation Analysis

The implementation analysis required field visits to the community college, CSU and UC campuses implementing the program, to observe first hand how the Transfer Centers were working, how they were coordinated with other services and programs within the two- and four-year institutions, and how they were supported by campus administrators and faculty.

The following implementation issues were studied in the fieldwork:

- What were the goals of the program from the perspective of the top level administrators on each campus, the staff implementing the program, and their immediate supervisors?
- How were the Transfer Centers organized and staffed to met those goals? What activities were conducted?
- What were problems were encountered in implementing the Transfer Center plan and how were they overcome?
- What was the historical approach to transfer on each campus, and what new efforts were underway which could affect the transfer function?
- What intersegmental activities were implemented in the Transfer Center Program, and what was the nature of intersegmental cooperation?

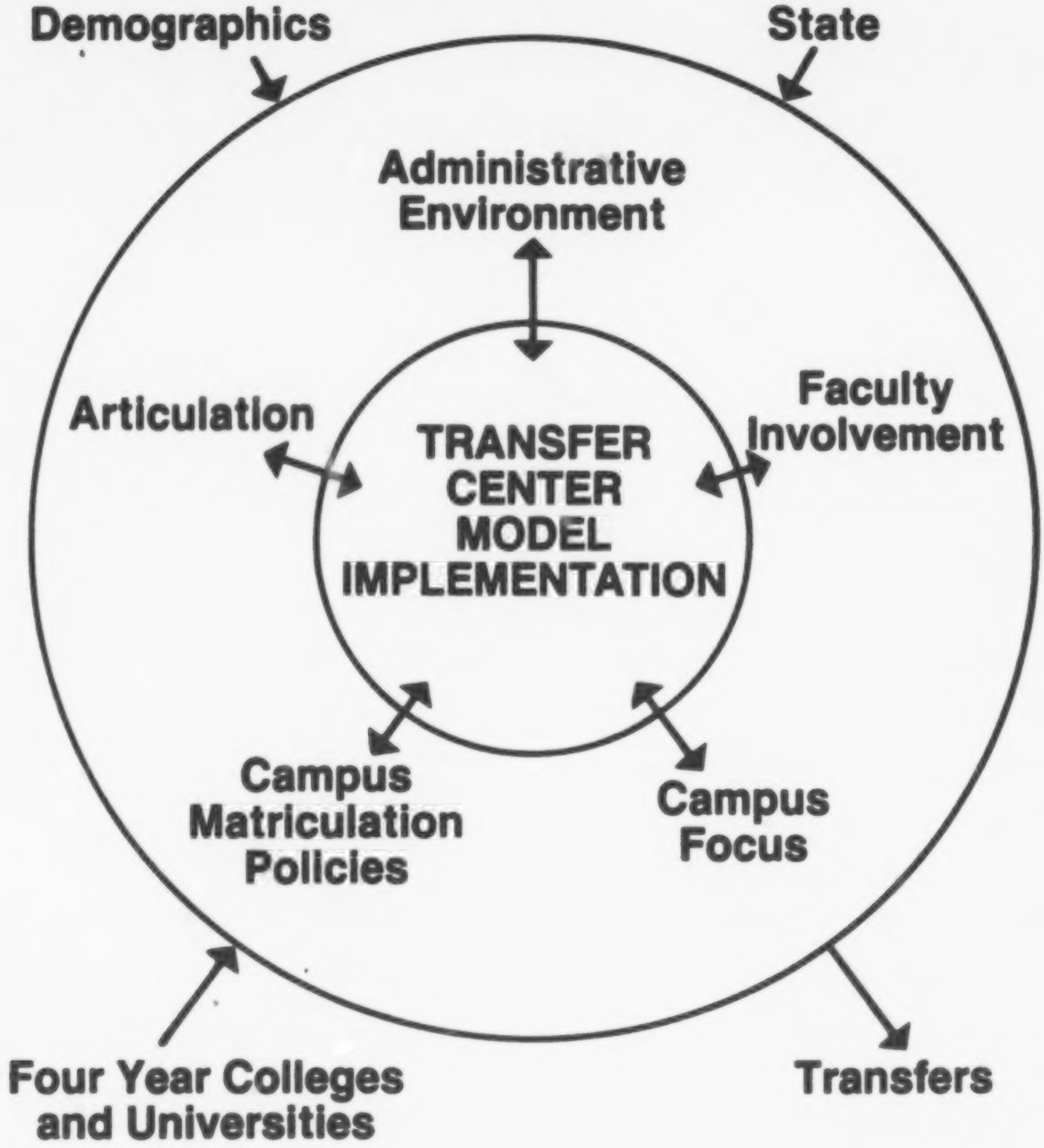
In order to evaluate the quality of program implementation, the evaluation set out to determine what strategies for the delivery of transfer services were successful under differing college conditions. The evaluation fieldwork was designed to gather information on campus environments and on the implementation of the Transfer Center model, so that success could be assessed in a broad context. Figure 1 depicts a conceptual model of the Transfer Center in this wider campus setting.

Figure 1 shows a number of background variables that are largely outside the control of the college, including student demography (student body size, ethnicity), state policies, and the locations and policies of four-year colleges and universities. The figure also depicts a number of variables in the community college campus environment that can affect the course of Transfer Center implementation -- the administrative environment, campus matriculation policies, the status of articulation with four-year institutions, the tradition of faculty involvement, and the relative focus placed on transfer versus other community college functions.

Within these campus settings Transfer Center staffs implemented various models of service delivery -- they identified a pool of potential transfer students, developed a set of Transfer Center clients and provided services to those clients. These services included tracking the academic progress of potential transfer students, trying to motivate students to transfer, and assisting students in the transfer process.

The implementation analysis consisted of fieldwork visits -- observations, interviews, and on-site documentary data collection at participating community colleges and four-year institutions -- as well as follow-up campus telephone interviews and a small telephone survey of a sample of students who had recently transferred. In the first year of the evaluation, nineteen community college sites were visited, as well as eleven four-year campuses. On the basis of what was learned in these visits, clusters of selected two- and four-year campuses were identified as candidates for fieldwork in year two. Seven four-year sites not visited during the first year were included in year two fieldwork, together with eight associated community colleges. Re-interviews at the remaining eleven community colleges were conducted by telephone. One community college was not visited, though a

Figure 1
Conceptual Model of the
Transfer Center Pilot Program


Demographics
State
Administrative Environment
Articulation
TRANSFER CENTER MODEL IMPLEMENTATION
Faculty Involvement
Campus Matriculation Policies
Campus Focus
Four Year Colleges and Universities
Transfers

telephone interview was conducted with the Transfer Center director.[13] Table I-9 summarizes the fieldwork effort.

Table I-9

Transfer Center Evaluation Fieldwork

	Number of Campuses Visited	
	1986-87	1987-88
COMMUNITY COLLEGES	19	8
FOUR-YEAR COLLEGES	11	7

At each community college campus site visit, interviews were conducted with the college President, Chief Student Services Officer, Chief Instructional Officer, Academic Senate president, Transfer Center director, and directors of counseling, EOPS and enabler (disabled student) services. Additional interviews were often conducted with other faculty and administrators. Each respondent was asked a set of questions designed to elicit information on how the Transfer Center concept was being implemented on the campus, strengths and weaknesses of the program, and information about the overall context in which the program operated.

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[13] This college was a late entry to the Pilot Program, and was not included in the evaluation specifications originally laid out by CCC and INTER-ACT.

The field visits to four-year institutions explored how the four-year colleges implemented the Transfer Center program; the nature of intersegmental cooperation among community colleges and four-year colleges in the program; and the impact on Transfer Center implementation of articulation and admissions policies. At each four-year campus field visit, the Transfer Center coordinator was interviewed, as were campus student services and academic affairs administrators, faculty leaders and top level campus administrators. Appendix A provides an overview of the topics covered during the fieldwork interviews.

In the spring of 1989, 171 community college students who had transferred in fall 1988 from three Pilot Program colleges were surveyed by telephone. Survey respondents were enrolled at two CSU campuses and one UC campus. A random sample was drawn from the pool of white transfers, and attempts were made to call all Asian, black and Hispanic transfers. The students were asked about their use of Transfer Center services, their satisfaction with those services, and their means of obtaining information on transfer admissions, housing and financial aid. Table I-10 shows the survey population and number of respondents by ethnic group across all three four-year institutions; Appendix B contains the student survey instrument.

Table I-10

Student Survey Population and Respondents

Ethnic Group	Population	Respondents
Black	44	29
Hispanic	85	39
Asian	107	44
White	285	59
TOTAL	521	171

b. Effectiveness Analysis

In a sense, the Transfer Center Pilot Program was an experiment in which the state wished to test the effectiveness of a special approach to increasing transfer for community college students. In a laboratory experiment conditions can be carefully controlled, subjects can be randomly selected, control groups can be developed, and results can be compared between the experimental and control groups. The Transfer Center program fulfilled none of these classic experimental conditions. It was implemented by colleges that were not randomly selected -- they were colleges with a special interest in increasing transfer for all students, especially underrepresented students. There was no specific control group per se, since some other community colleges established their own Transfer Centers with local funds and many pursued other policies designed to increase transfer. The evaluation approach to comparing results for Pilot Program versus other colleges had to take this reality into account in order to provide the state with an assessment of the effectiveness of the program. To do so, we compared colleges before and after the program was implemented, with results presented in a simple four-way table:

	Transfer Rates Before the Program	Transfer Rates After the Program
State Funded Transfer Center Colleges		
Other Colleges		

This quantitative analysis is thus designed to answer two major questions: (1) What was the average transfer rate of participating colleges before and after Pilot Program implementation? (2) How did the state funded Transfer Center (SFTC) colleges compare to other colleges before and after Pilot Program implementation?

The transfer rate for a community college was defined as the total number of transfers to UC or CSU from the college divided by the college's total credit enrollment. This transfer rate calculation is far from ideal. An ideal transfer rate would relate the students' date of transfer to their date of entry to the community college. An example of an ideal transfer rate is the percent of students entering community college in the fall of 1985 who transferred to a four-year college in the fall of 1988. Given the limitations in statewide databases, however, calculations of cohort transfer rates were not possible for this analysis.

Two transfer rates were developed for Pilot Program and other colleges: (1) the "pre" transfer rate, calculated by dividing a college's total transfers in 1982, 1983 and 1984 by its total fall credit enrollment in those years, and (2) the "post" transfer rate, calculated by dividing a college's total transfers in 1987 by its fall 1987 credit enrollment. Specifically, the pre-Pilot Program to post-Pilot Program comparison examines the difference between the average transfer rate for the three years prior to the program's inception (1982, 1983 and 1984) with the transfer rate in the last year of the program (1987). An average of three years of transfer activity (1982, 1983 and 1984) was selected as the basis for comparison with the post-Pilot Program transfer rate in order to stabilize the sometimes significant year-to-year shifts in transfers and community college enrollments. Transfers in 1987 were selected as the post-Pilot Program point because the program was most fully implemented in 1987-88. Moreover, it often takes even full-time community college students two to three years to earn the units needed to transfer to a four-year institution, so the full impact of the Transfer Center Program would not be substantially felt until 1987-88 or 1988-89 for students entering community college in the fall of 1985. The evaluation was limited to using data from 1987-88 as the last year for the quantitative analysis of transfer activity, because the study concluded prior to the close of the 1988-89 academic year.

c. Descriptive Statistics

The quantitative analysis was also designed to describe the characteristics of community college transfers from participating and non-participating colleges. Data were obtained from the systemwide offices of UC and CSU on the community college experience of UC and CSU transfers statewide in 1986-87 and 1987-88 -- their total units, grade point average and enrollment status (whether admitted transfers enrolled at the four-year institution). These data were used to construct profiles of transfer students from the Pilot Program compared to other colleges.

A profile was also developed of the characteristics of students who were enrolled at Pilot Program colleges in 1986-87 and were admitted as transfers to UC and CSU in 1987-88. This profile used individual-level student data from Pilot Program community colleges and the four-year segments. The profile provides additional data on the community college experience of Transfer Center clients and non-clients, including their attendance pattern (full- or part-time), and whether they were enrolled in a remedial English or math course.

d. Data Sources and Limitations

The analyses outlined above utilized three methods for assessing transfer activity: the pre-post comparison of transfer rates (see Chapter IV); a synthesis of statewide aggregate data on student transfers in 1986-87 and 1987-88 (see Chapter III, Section A; and a description of the characteristics of a cohort of individual transfers from Pilot Program campuses (see Chapter III, section B). Table I-11 summarizes the sources of the data used for these analyses.

For the pre-post program comparison, the data used to estimate transfer rates were fall transfers for UC, and full year transfers from CSU, obtained from data published by CPEC, and data on community college students obtained from data published by the Chancellor's Office, California Community Colleges.

The descriptive profiles of community college transfers for 1986-87 and 1987-88 utilized UC and CSU systemwide data on the characteristics of community college transfer students.

The cohort analysis examined data on transfers from Transfer Center colleges, (obtained from the community colleges by special request from the Chancellor's Office) and from UC and CSU systemwide offices. Using Social Security Numbers of students to link the two-year and four-year data, we reviewed transfer students' experience in community college on key variables (enrollment in remedial courses, part- or full-time attendance pattern, whether they were a Transfer Center client) with their profile as transfers (number of total units, grade point average,

Table I-11

Data Sources

Analysis	Data Source
Comparison of transfer rates before and after the Pilot Program	Published CPEC data on transfers, 1982 - 1987: UC fall only; CSU full year; student ethnicity data fall only Chancellor's Office enrollment data by community college, 1982 - 1987
Characteristics of transfers, Pilot Program and other colleges, in 1986-87 and 1987-88	UC and CSU segmental offices databases on transfer admissions in 1986-87 and 1987-88
Cohort analysis of students enrolled in Pilot Program colleges in 1986-87 and enrolled at UC or CSU in 1987-88	Community college data from Chancellor's Office, supplemented by 1987-88 data provided by Pilot Program colleges on students' Social Security Number and community college academic experience UC and CSU segmental offices databases on transfer admissions

enrollment status at the four-year college).[14]

This cohort analysis was performed for those students enrolled in a Transfer Center community college in 1986-87 and reported admitted to a UC or CSU campus as a transfer in 1987-88. This reflects a single cohort as it moves from the community college to the four-year institution.

Limitations in the data used in the quantitative analysis are important to bear in mind when reading this report. A serious limitation in the transfer statistics is the absence of data on winter and spring transfers to UC prior to 1986-87. As a result, the pre-post analyses for UC are presented using fall transfers only; for CSU the analyses use full year transfers. Another major limitation is in the data on ethnicity of transfers. Ethnicity designations are not available for a relatively high number of transfers (up to 10 percent) each year, and these students are omitted from the analysis of transfer rates for different ethnic groups. We do not know how the latter transfer rates would be changed if these students of unknown ethnicity were included.

Transfer data from both the pre and post periods are not available from private colleges and universities, and transfers to these institutions (which made up 19 percent of transfers statewide in 1987), are not included in the analysis of program effectiveness.

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[14] One Transfer Center college is not included in this analysis because it does do not collect Social Security Numbers from students.

For the cohort analysis of transfers from Pilot Program colleges who attended community college in 1986-87 and were admitted to UC and CSU in 1987-88, several cautions are in order. We did not obtain Social Security Numbers for all community college students enrolled in pilot colleges in 1986-87. A small number of Social Security numbers at each community college in the Pilot Program (2 - 5 percent) were not available, and one college does not collect Social Security numbers. This college is a large institution with hundreds of CSU and UC transfers. It was omitted from the cohort analysis and that omission may change the absolute values of some variables, although the overall direction of the data should not change.

Within the cohort analysis, results for identified Transfer Center clients were compared to results for transfers not identified as Transfer Center clients. In the Pilot Program, each individual college was allowed to define who was and was not a Transfer Center client, and these definitions were not consistent among Pilot Program colleges. Some colleges recorded individuals who merely picked up an application; others recorded as clients only those students who received counseling from a staff member or four-year representative.

II. IMPLEMENTATION OF THE PILOT PROGRAM

Chapter II presents findings on the implementation of the Transfer Center Pilot Program at participating community colleges, UC and CSU campuses, and on the nature and extent of intersegmental activities. The chapter is organized into four parts: Section A presents findings on the implementation of the program by participating two-year colleges. Section B presents the implementation analysis for participating UC and CSU campuses, and Section C discusses intersegmental activities.

A. IMPLEMENTATION AT THE COMMUNITY COLLEGES

The implementation of the Transfer Center Pilot Program must be viewed in the context of the Centers' college settings -- critical elements in the campus environment that can influence the direction and progress of program implementation. Figure 1, discussed in Chapter I, depicts a conceptual model of the implementation of the Transfer Centers in their college settings. This section of the report presents an analysis of Transfer Center implementation at the community colleges in light of this model. First, administrators' program goals are discussed and the organization of the Transfer Centers is described. Next, elements in the college environment that have affected Transfer Center implementation are analyzed, including the administrative environment, campus matriculation policies, the status of articulation with four-year institutions, faculty involvement, and the relative priority placed on transfer versus other community college functions. Evaluation findings on Transfer Center activities and clients are then reported. Three models of Transfer Center implementation are described, and components of successful programs are summarized. Following a brief discussion of the state role in program administration, the section concludes with a summary of key findings on program implementation at the community colleges.

1. Administrators' Goals

Transfer Center directors and other administrators on each campus were asked about their goals for the program. The program goal expressed by administrators at seventeen of the 20 colleges in the program was to increase all transfers or improve the transfer function, with an emphasis on increasing the transfer rate of black and Hispanic underrepresented students. At three colleges, a somewhat narrower goal for the Transfer Center was expressed by interviewees: solely to increase black and Hispanic transfers. These three colleges had black and Hispanic enrollments exceeding 40 percent. On each campus visited, there was substantial agreement on program goals among the administrators interviewed.

The goals expressed at the community colleges (as well as four-year colleges -- see Section B, below) were somewhat different from the state plan in the definition of underrepresented students: The state plan had defined underrepresented students to be black, Hispanic, Native American, disabled and low income students. Most community college administrators defined underrepresented students as black and Hispanic. At two colleges, administrators expressed a goal for underrepresented students that included Native Americans.

2. Organization of Transfer Centers

a. Directors' Background and Duties

All participating community colleges placed their Transfer Centers in the student services section of their college administrative structures. As shown in Table II-1, over half of the Transfer Center directors were appointed by the colleges from within the ranks of their own counseling staffs.

Table II-1

Previous Positions Held by Transfer Center Directors

Prior Position	Number of Directors
Counselors at the same college	13
Counselors at another community college	2
Elementary and Secondary Education Counseling or Administration	2
Four-Year University Administration	2
Counseling in Social Services	1

All but a few directors reported they received no special training when they assumed the position of director. Five of the twenty directors had previous management experience; fifteen did not. Our interviews revealed that when directors lacked experience in management, it was harder for them to resolve conflicts with other student services units.

Each Center director was responsible for implementing the Transfer Center program consistent with the state plan and the college's approved application to the state.

At every Pilot Program college, the Transfer Center director performed a wide range of activities. All the directors were responsible for (1) hiring and supervising Transfer Center staff, (2) identifying potential transfer students, (3) providing services to those students, (4) planning and implementing activities with four-year institutions' Transfer Center representatives, and (5) providing management reports to the state Chancellor's office on a regular basis.

In 1986-87, eight of 19 Transfer Center directors interviewed reported that they performed other duties in addition to managing the Transfer Center. We found that these other assignments diluted the directors' focus on transfer in the initial years of the pilot Program. By 1988-89, ten of 20 directors interviewed reported that they had assignments other than Transfer Center director. The duties of Transfer Center directors in 1988-89 are displayed in Table II-2.

Table II-2

Duties of Transfer Center Directors, 1988-89

TC Director's Assignment	Number
Solely Transfer Center Director	10
Director and Counseling Assignment	7
Director, Articulation Officer and Counseling Assignment	2
Director and Articulation Officer	1

b. Integration of Transfer Centers With Other Student Services

The evaluation fieldwork examined the extent to which well-established student services on each campus -- counseling departments, EOPS, and disabled student services -- were integrated with the Transfer Center program. Integration was defined as evidence of clear role differentiation between a student services unit and the Transfer Center, together with evidence of cooperative activities between the two units. Lack of cooperation, ill-defined roles and conflict were considered to be evidence of an absence of integration. Our interviews suggest that integration of services enhanced the effectiveness of efforts to recruit Transfer Center student clients, and increased the quality and quantity of transfer counseling.

Counseling

Transfer Centers were designed to augment the transfer-related services provided by community college counselors. On Pilot campuses, structuring the role of the Transfer Center director in relation to the counseling department required careful planning and the involvement of top management -- usually the Chief Student Services Officer. In order to integrate the Transfer Center with counseling, the roles of the counselors and the Transfer Center director in providing transfer advice to students had to be clearly defined and communicated to staff. Student referral policies and practices had to reflect this desired role definition.

When roles were not clearly defined or when conflicts between the counseling department and the Transfer Center director were not resolved, Transfer Center services were not integrated with counseling. Lack of integration created extra workload for some Transfer Center directors, confused students, and slowed down the process of identifying potential Transfer Center clients. For example, one Transfer Center director who reported to the director of counseling received dozens of routine student inquiries about transfer every week from students who had been referred by several members of the counseling staff. These counselors had the information the students needed, but resented the new status of the director, a former counselor. The director accepted the workload, which reduced the time he could spend to recruit Transfer Center clients. The issue was resolved when the four-year coordinators who worked with the Transfer Center raised the issue of what they saw as the Center's inadequate outreach to underrepresented students. The use of the Transfer Center director's time for counseling individual students was discussed and roles were clarified.

Two methods of integrating the Transfer Center with counseling were widely used. The first method was to bring counselors into the center on a regular basis by stationing all the counselors in the Transfer Center facility on a rotating schedule. These counselors provided routine transfer information to drop-in students or to students by appointment.

The second method was to clearly differentiate the roles of Transfer Center directors and counselors. The counselor would handle routine transfer planning for students. The Transfer Center director would handle special, unusual or complex cases referred by counseling staff. Some centers used both methods to integrate counseling. Both methods appeared to work to protect the Transfer Center director's time while providing transfer counseling services to students.

EOPS

EOPS units provide counseling, academic support and financial aid to low-income community college students. Many EOPS clients are black or Hispanic. Integration of Transfer Center services with EOPs was accomplished at all but three colleges.

Typically, transfer-bound EOPS clients received academic planning advice from their EOPS counselors. Transfer Center activities (i.e. application workshops, one-on-one sessions with four-year representatives, career days with faculty) then augmented these EOPS services. In some cases, Transfer Center services replaced some services previously provided by EOPS, freeing the time of EOPS staff for other activities.

Cooperation with EOPS consisted of joint recruitment efforts to encourage EOPS clients to utilize Transfer Center services. Jointly sponsored activities were also common. For example, at one college, EOPS and the Transfer Center jointly funded an overnight tour of a four-year college for EOPS students, most of whom were minorities.

Not all EOPS clients were pursuing a transfer goal -- many were enrolled in non-transfer vocational classes. On half of the campuses, EOPS and Transfer Center staff together identified these students and sponsored special meetings and events to encourage them to consider a four-year degree.

Disabled Student Services

Disabled community college students received transfer counseling as well as other support services from enabler (disabled student) services staff. In some cases, disabled community college students also received transfer assistance from four-year staff providing disabled student services.

When Transfer Center services were integrated with those offered by Disabled Student Services, it usually consisted of joint efforts to invite disabled students to attend Transfer Center activities. Special events designed to motivate disabled students to transfer and to inform them of programs and services at four-year colleges were reported at three community college campuses. Enabler services directors interviewed on two campuses felt that they adequately met the needs of disabled transfer students, in conjunction with their four-year counterparts. They did not feel that Transfer Center services were needed for their clients. In contrast, EOPS directors on those campuses viewed Transfer Center efforts as a worthwhile expansion of services for EOPS clients.

Summary

Transfer Center outreach efforts were focused generally on black and Hispanic students -- who were also the focus of four-year college outreach staff. The pattern of student services integration on community college campuses mirrored that priority, in that more effort was directed at joint recruitment with EOPS for minority students than with enabler services for disabled students.

At seven colleges, integration of services was complete across all units. At thirteen colleges there was partial integration -- some but not all units were integrated.

At colleges reporting only partial integration of the Transfer Center with student services units in 1986-87, lack of integration with the counseling department was viewed as the most serious problem by Transfer Center directors. Campus interviewees indicated that conflict between the Transfer Center and the counseling department was their major concern in attempting to integrate the Transfer Center into the range of campus student services. By 1988-89, all but one Transfer Center reported full integration with counseling services. Table II-3 summarizes evaluation findings on student services integration in the Pilot Program by 1988-89.

Table II-3

Integration of Student Services
With Transfer Centers

1988-89

	Transfer Center Integrated With:		
Number of Colleges	Counseling	EOPS	Enabler
7	X	X	X
9	X	X	
3	X		
1		X	
TOTAL	19	17	7

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3. Campus Environment

The Transfer Center Pilot Program was implemented within the context of varied and complex campus environments. This subsection describes important elements in those environments that affected the Transfer Centers -- administrative support for the program, the college's historical emphasis on transfer, the status of articulation with four-year institutions, traditions of faculty involvement, and matriculation policies.

a. Administrative Environment

As noted earlier, all twenty Transfer Centers were located organizationally in the student services areas of college administrations. Eleven Transfer Center directors reported directly to the Chief Student Services Officer; seven reported through the Director of Counseling to the Chief Student Services Officer. One director reported to the Dean of Academic Affairs (who had administrative responsibility for student services units at that college). One director reported through the Dean of Special Projects to the Dean of Academic Affairs. Our interviews revealed that Transfer Center directors who reported directly to the Chief Student Services Officer enjoyed greater access to top management and were able to resolve conflicts with other student services units more easily than directors who reported through the Director of Counseling to the Chief Student Services Officer.

College presidents at nineteen Transfer Center campuses were interviewed during the course of evaluation fieldwork. The interviews explored the extent to which the Transfer Centers were viewed by the presidents as important campus activities to improve the transfer function, and sought evidence of the presidents' active involvement in the Transfer Center effort. Evidence of active involvement was considered to include allocation of campus resources to the Center, changes in policies or procedures to further the goals and activities of the Center, or direct intervention by the president to resolve administrative impasses at either the community college or with participating four-year colleges. If a college president engaged in a wide range of supportive activities, we characterized that support as **high** or **active**. If a college president engaged in some supportive activities but denied support in some instances, we characterized support as **somewhat supportive**. If a college president showed no evidence of active support, we rated the president as **not supportive**. In the latter two cases, the Transfer Center enjoyed some support from top management but not to the degree experienced by Transfer Centers in colleges with active presidential support. Barriers to effective administration were always removed in **active support** colleges, whereas some barriers often remained at colleges in the **somewhat supportive** or **not supportive** categories. Table II-4 shows the results of these ratings.

Table II-4

College President Support
For Transfer Centers

1987-88

Presidential Support	Number of Campuses
High or active support	11
Somewhat supportive	7
Not supportive	1

In addition to the college president, Chief Student Services Officers and Chief Instructional Officers were important elements in the administrative environments in which Transfer Centers operated. Second-level administrators at the colleges were able to resolve administrative barriers to implementation by changing policies or procedures, providing additional resources needed by the Centers, clarifying roles and responsibilities among student services units, and ensuring that Transfer Center directors were kept aware of and involved in decisions affecting the transfer function on campus.

At sixteen of the twenty colleges, Chief Student Services Officers provided active administrative support to the Transfer Center. At twelve of the colleges, the Chief Instructional Officer provided administrative support to the Transfer Center. We gathered information on the administrative environment for Transfer Centers during our fieldwork observations and interviews and in follow-up telephone interviews. Table II-5 summarizes these findings. It shows that twelve Transfer Centers received active management support from two of the three highest level administrators at the college. This support enabled the Transfer Center director to resolve many implementation issues, particularly integration with other student services units. In all cases where problems arose between participating two- and four-year colleges, the community colleges involved had Transfer Centers that did not receive the active support of the college president. (Serious problems were rare; they are discussed in Section C.)

Table II-5

Administrative Environment for Transfer Centers

1988-89

Number of Colleges	Active Support Provide by -- CEO	CIO	Chief Student Svcs Officer
10	X	X	X
1	X	X	
1	X		X
1		X	X
4			X
3	----------- None -------------		

b. Focus on the Transfer Function

The degree of campus focus on transfer as opposed to other functions of the community college was an important environmental factor for Transfer Centers: Where transfer was a high priority and an important focus of college concern, a Center was more likely to find student services and other staff with experience working on transfer problems, and faculty who were involved in transfer issues. The degree of focus on transfer varied by campus depending on the priorities of college administrators and each campus' unique history and circumstances; the relative emphasis placed upon transfer at the Pilot Program colleges was examined during interviews with faculty and administrators. Table II-6 shows evaluation findings on the transfer focus issue.

Table II-6

History of Campus Focus on Transfer

	Number of Colleges
Traditionally High Focus on Transfer	4
New Emphasis on Transfer	12
Campus Focus on Other Functions (Voc Ed, Community Service, Remedial Education)	4

c. Articulation

Articulation was another element of the campus context that had an impact on Transfer Center program implementation. Community college courses that are "articulated" with those of four-year colleges are accepted for admission when the transfer student applies to the four-year institution, and accepted for credit by the four-year institution once the transfer student enrolls there. Articulation of community college courses occurs at three levels. First, a community college course must be considered a transfer level course (English 1A is a transfer level course; remedial

English is not). CSU allows community colleges to designate which of their courses are "transferable for credit." The UC systemwide office reviews the catalogs of community colleges and decides which courses to accept; this systemwide determination applies uniformly to all UC campuses.

Second, a community college course that is transferable for credit may or may not be usable to satisfy UC or CSU requirements for general education (called "breadth" requirements at UC). The CSU Trustees have adopted five areas of required general education for the first two years of undergraduate preparation: basic learning skills, natural science and math, humanities, social, political and economic institutions, and lifelong development. CSU allows the community colleges to "certify" that their transferable courses satisfy these general education requirements. For example, students at a community college who pass English 1A and desire to transfer to a CSU campus have their community college "certify" that they have passed English 1A and that it helps to meet part of the basic learning skills area, one of the general education areas required by CSU. UC breadth requirements vary by UC campus. For a community college course to be used to satisfy a UC campus breadth requirement, the community college must have an official articulation agreement with that campus. Articulation agreements providing credit for community college courses toward UC breadth requirements are generally made between schools and colleges on the UC campus, (e.g., a College of Letters and Science), and the community college.

A third type of articulation is required for community college courses that students wish to have accepted as meeting their major field requirements at the four-year college or university. For this type of articulation, official agreements are required between the community college and each UC or CSU campus. Although procedures vary by senior institution, in general articulation agreements for majors are made between the community college and the faculty in the four-year institution's academic department for that particular major. Without such agreements, community college students transferring to a four-year institution in a particular major field have found that some courses had to be repeated once they had enrolled at the four-year campus. In other cases, community college students have been refused admission to a four-year college in the major field of their choice, because their preparation included courses that were not recognized by the four-year faculty as satisfying the lower division requirements for that major.

Articulation agreements serve as the foundation for the community college's transfer activity with four-year institutions. With articulation agreements in effect, a community college student can be assured of admission to his or her intended four-year college by passing a certain specified number of transfer level courses. Absent an articulation agreement, it is a gamble for the applicant as to whether he or she will be admitted, and it takes more time and effort by the four-year institution's admissions staff to evaluate the student's record. Articulation agreements also make it less likely that community college students will have to take extra courses before transferring in order to satisfy requirements at the four-year college of which they were unaware as community college freshmen.

At the time of the 1986-87 field visits to community colleges, eight of the twenty Transfer Center campuses reported one or more serious articulation problems with their UC and/or CSU partners in the Transfer Center program. During the 1987-88 academic year, in all but one case, four-year institutions reported that articulation was complete and the problems had been resolved. At this writing, complete breadth and general education agreements are in place among all the Transfer Center community colleges and the UC and CSU campuses they are linked to in the Pilot Program. With the exception of one four-year campus and its participating community colleges, agreements on the most popular transfer majors are also complete.

Articulation agreements traditionally have been disseminated to students through their community college counselors, but Transfer Center dissemination of agreements to students via articulation major sheets became increasingly common in the Pilot Program. An articulation major sheet shows a four-year college's entrance requirements, and its general education and major courses, in terms specific to a community college's course titles and numbers. These sheets were disseminated to students in the Transfer Center program as part of the academic advising service provided by the four-year campuses. Another common dissemination technique was to encourage students to help themselves to displays of articulation major sheets in the Transfer Center facility. In our spring 1989 telephone survey of recent transfers, students were asked what information they most needed in order to transfer. The majority of respondents reported that information on majors and on the general education/breadth requirements of four-year institutions was most important, and many reported that they received this information primarily from the Transfer Center on their community college campus.[15]

Transfer agreements were another means of disseminating articulation information to students. Transfer agreements between a community college and a four-year college are a formal expression of articulation and admissions policies. Individual students are guaranteed that if they pass certain patterns of courses and attain a certain GPA they will be admitted to the four-year college. Students received a personalized form to that effect, usually during their one-on-one academic advisement sessions with the four-year representative.

There was significant progress in articulation among participating community colleges and four-year institutions over the course of Pilot Program implementation. The Transfer Centers provided a focal point for raising issues and resolving disputes in articulation, even though neither the community college Transfer Center director nor the four-year Transfer Center representative was the articulation officer in most cases. Progress in articulation was widely regarded on four-year campuses as a positive aspect of the Transfer Center program.

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[15] These findings are discussed in more detail below.

d. Faculty Involvement

The degree of faculty involvement in articulation and student services activities was an important feature of the campus environment in which the Transfer Center was implemented. Faculty involvement in the Transfer Center effort included (1) serving as members of the Transfer Center Advisory Committee, (2) referring potential transfer students to the center, (3) participating in meetings with faculty from four-year institutions in similar disciplines, (4) serving as mentors to individual Transfer Center clients, (5) inviting Transfer Center staff and four-year representatives to speak to students in their classes about transfer opportunities, and (6) participating in special events focused on careers and four-year degrees by major.

Based on our fieldwork and follow-up telephone interviews, we characterized the extent of faculty involvement on each campus as high, medium, or low. Low faculty involvement meant that faculty participation was limited to membership on an advisory committee or informal referrals for students. Medium involvement meant that faculty went beyond advisory committee membership and participated in Transfer Center activities such as career days or meetings with four-year faculty. High faculty involvement indicated faculty participation in a wide range of Transfer Center activities. Table II-7 shows evaluation findings on faculty involvement.

Table II-7

Faculty Involvement in Transfer Center Activities

1988-89

Degree of Involvement	Number of Colleges
High	5
Medium	7
Low	8

At the five colleges with high levels of faculty involvement, the Chief Instructional Officer provided active administrative support to the Transfer Center.

e. Matriculation Policies

Matriculation policies at a community college determine how students are assessed at college entry, whether they must receive counseling prior to enrolling in college courses, and how the system of course pre-requisites is structured. In 1986 the Legislature and the Governor adopted a matriculation plan for the community colleges.[16] Matriculation was to be implemented over a three year period, and was designed to upgrade student assessment, develop improved student information systems and a system of course pre-requisites, and enhance orientation and counseling services. In 1987-88, community colleges were just beginning to implement the state matriculation policies. In the first year of matriculation implementation the state stressed investment in community college student information data systems. It is too early to assess the impact of matriculation on the transfer function, though 70 percent of community college interviewees who expressed a view on matriculation felt that it would have a positive impact on transfer. Matriculation program factors which they predicted would enhance transfer included increased opportunity for students to set goals for their community college experience through the required counseling component, and improved access to student data provided by enhanced information systems.

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[16] C.1467 of the Statutes of 1986

Approximately one-third of the community college staff interviewed during our fieldwork visits identified factors in matriculation that they felt could prove detrimental to transfer. They were concerned, for example, that some students might be intimidated by extensive testing at entry. In this view, testing could erect a new barrier for students, particularly under-represented minority students who were the first in their families to attend college. These interviewees also feared that matriculation might result in unnecessary remediation for students who did not "test well" and that this extra remediation would prolong students' community college careers.

The first impact of Matriculation Program resources for student information systems was observed in the 1987-88 fieldwork visits. In the first years of the Transfer Center program, many of the Transfer Centers reported that they did not have computer access to student transcripts, but were required to obtain paper copies of transcripts from other offices in preparation for students' individual appointments with four-year representatives. In our 1987-88 community college field visits, the impact of Matriculation Program resources was evident in the increased availability of networked student data systems for counselors and Transfer Center personnel at six of the eight colleges visited.

4. Transfer Center Processes

This section describes the operations of the Transfer Centers -- the activities of the Centers, the characteristics of their clients, and differences in Transfer Center models of implementation.

a. Transfer Center Activities

On each campus, the Transfer Center staff identified a pool of potential transfer students, developed a set of Transfer Center clients, and provided services to those clients. These services included motivating students to transfer and assisting students in the transfer process.

Identifying Student Clients

Figure 2 shows schematically how Transfer Centers identified and developed a set of clients. First, a pool of potential transfer students was identified by various means, including self-referral at registration and referrals from faculty, counselors, and clubs with a minority emphasis. This pool of potential transfers was then invited to attend Transfer Center activities. Publicity on campus (signs, articles in student newspapers, flyers to faculty) was augmented by direct mail and phone contact to identified potential transfer students based on their major, desired four-year college, ethnicity, and/or unit status.

For evaluation purposes, each campus kept a record of the Social Security Number of Transfer Center clients and reported it to the state.[17] Table II-8 shows the characteristics of community college students reported to be Transfer Center clients, compared to non-clients, in 1986-87. (Each Transfer Center could decide what level of student participation in Center activities defined a Transfer Center client.) Overall, eight percent of the students enrolled at Pilot Program campuses were designated Transfer Center clients in 1986-87.

Table II-8 shows a slightly higher proportion of minority students among Transfer Center clients than among non-clients,

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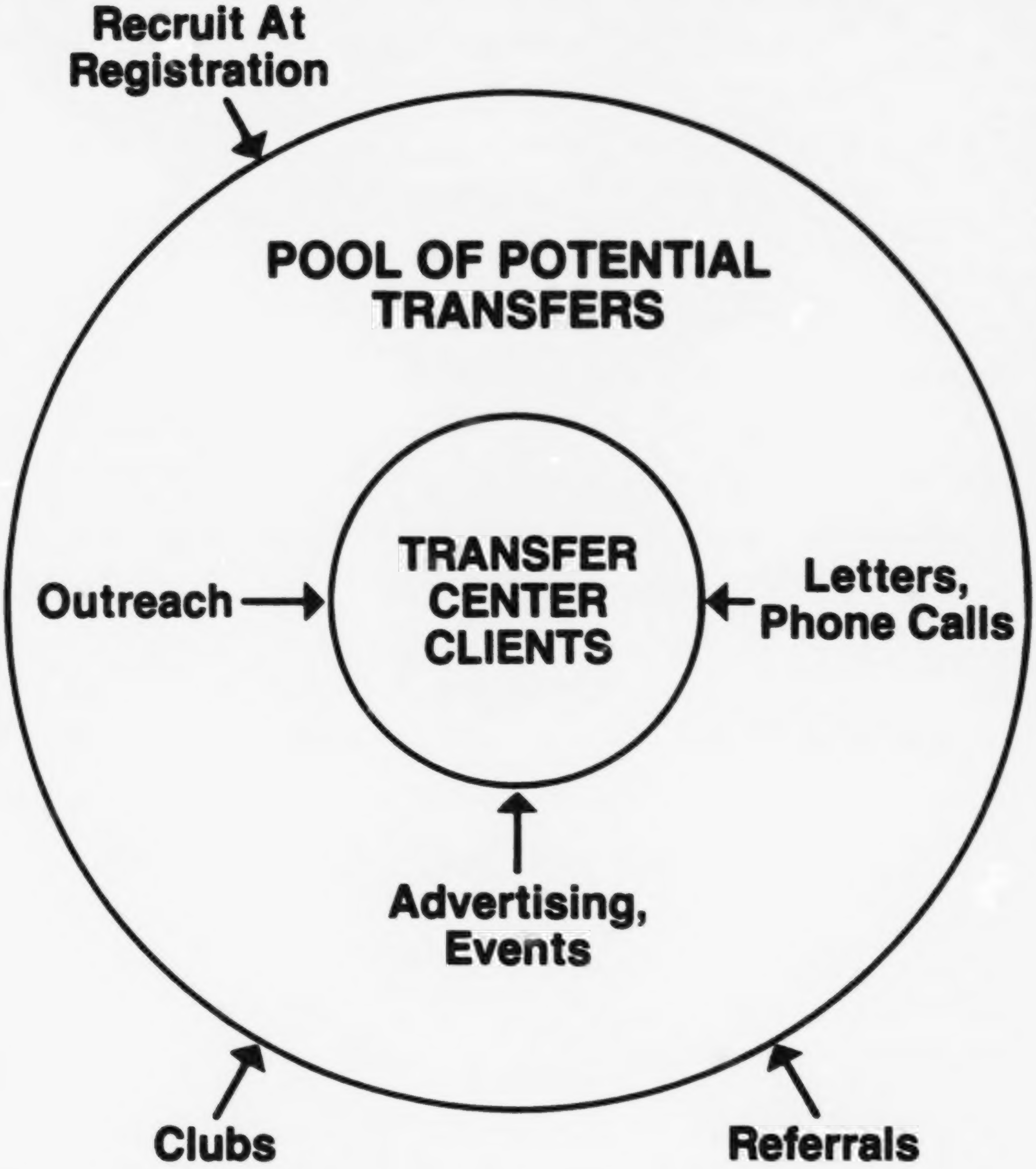
[17] One college did not collect Social Security Numbers from students. It is omitted from this profile of Transfer Center clients.

Figure 2
The Transfer Center Process



possibly reflecting the Pilot Program emphasis on underrepresented populations.

Almost one-fifth of Transfer Center clients had enrolled in remedial math or English. One tenth of non-Transfer Center clients had done so.

The great majority of Transfer Center clients were enrolled for seven or more units, with more than half enrolled full-time. Non-clients, in contrast, were more heavily concentrated among part-time students enrolled in less than six units per term.

There was no major difference in the proportion of males and females among Transfer Center clients and non-clients.

Overall, this profile suggests that the Transfer Centers were successful in reaching full-time students, minority groups, and those taking remedial coursework.

In our survey of recent transfers to three senior institutions from three Transfer Center community colleges, 80 percent of the student respondents had heard of the Transfer Center. As shown in Table II-9, more Hispanic, white and Asian transfers than black transfers reported having heard about the Transfer Center, though black students who had heard of the Center were somewhat more likely to have taken advantage of its services. The students had learned of the Transfer Center from a wide variety of sources, most commonly from a posted notice, a friend, or referral from a counselor. As shown in Table II-10, students did not identify any one source of information as markedly superior to any other, though

Table II-8

Students Enrolled in SFTC Colleges

1986-87

	Transfer Center Clients	Non-Transfer Center Clients
Sex		
Male	47 %	46 %
Female	53 %	54 %
Ethnicity		
Asian	10.5%	9.7%
Black	11.8%	9.4%
Hispanic	18.5%	16.9%
White	44.6%	51.4%
Percent of College Enrollment	8 %	92 %
Enrolled in:		
Remedial English	19 %	10 %
Remedial Math	18 %	9 %
Attending Community College		
Full-time (12 + units)	56 %	19 %
Part-time (7-11 units)	25 %	27 %
Part-time (1-6 units)	19 %	54 %

fewer students said they learned about the Center from faculty or student orientations than from other sources. This suggests that the Transfer Centers practice of using a wide range of techniques to publicize their services was a prudent approach.

Though the student survey was not designed to yield definitive conclusions, these data suggest that Transfer Centers publicized their services most effectively to white, Hispanic and Asian transfers.

Table II-9

Use of Transfer Center by Ethnicity

	Percent of Students Who Heard of TC	Percent of Students Who Heard about TC and Used TC
Asian	79%	74%
Black	65%	88%
Hispanic	81%	75%
White	83%	79%
Overall	80%	78%

Table II-10

How Students Learned of Transfer Center

	Percent of Students
Mail	19%
Counselor	29%
Friend	29%
Posted Notice	33%
Noticed Facility	27%
Faculty	12%
Orientation	16%

Assisting Student Clients

Once students were ready to apply to transfer, Transfer Centers assisted them with the transfer process. Four-year college catalogues were made available at the Centers in order to provide a central and convenient location for catalogue access. Centers hosted workshops on application procedures for the UC and CSU systems and for individual campuses, and Center staff made appointments for individual students to meet with four-year college representatives to discuss the student's academic plans. Often, with the cooperation of four-year college representatives, Center staff tracked the applications of community college transfers and worked with students to get the necessary application documents filed. (Once students were admitted to a four-year college, it was up to that campus' representative to assist them with housing and financial aid information.)

In our telephone survey of recent transfers, we asked students what types of information they needed as transfer students, where they obtained the information, and how satisfied they were with the accuracy of the information they received.

Almost two-thirds of the respondents reported that they needed information on four-year institutions' general education/breadth and major requirements. Most students said they obtained this information from catalogs and their counselors. Many students also consulted Transfer Center staff or four-year representatives. Table II-11 displays these findings.

Table II-11

Information Needed By Transfer Students
And Means Used To Obtain It

Information Needed on --	Percent Needing Info.	% of All Students Using This Source				
		Catalog	Counselor	TC	4-Yr Rep.	Other
Gen Ed/Breadth Requirements	65%	49%	54%	18%	23%	14%
Major	60%	45%	35%	18%	26%	7%
Financial Aid	29%	16%	26%	14	10%	48%
Application Process	35%	11%	37%	40%	17%	14%
Eligibility	38%	27%	45%	20%	20%	17%

Ninety-four percent of the transfer students we surveyed said their needs for transfer information were met at their community college. We also asked them to rate their satisfaction with the accuracy of the information they received, on a scale of 1 to 5 -- from not satisfied to very satisfied. The average satisfaction rate ranged from 3.6 to 4.2, depending on the type of information needed. Students were relatively less satisfied with financial aid information (average satisfaction, 3.6) and more satisfied with information on majors (4.0), their eligibility (4.2) and the application process (4.2). The Transfer Center was one of a number of means these students used to get the information they needed for transfer. Survey respondents indicated that the most commonly used Transfer Center services were access to catalogs and applications forms, individual appointments with four-year representatives, and group workshops (see Table II-12).

Table II-12

Transfer Center Services
Used By Transfer Center Clients

Services	Percent of TC Clients
Access to catalogs	80%
Access to application forms	75%
Appointments with four-year reps	79%
Workshops	53%

Among the transfers who reported using the Transfer Center at their community college, about half (47 percent) reported that they used the Center once or twice, rather than on a continuous basis. Another fourth of the respondents (24 percent) said they used the Center three to five times, and the remaining 29 percent used it more than five times.

Within the group of students who utilized Transfer Center services at their community college, 76 percent overall rated their satisfaction with the services as high or very high. As a group, the black clients were the most satisfied; almost 90 percent gave Transfer Center services a high or very high satisfaction rating. At the same time, black student survey respondents were overwhelmingly negative in their rating of campus workshops as a means for acquiring the information they needed for transfer -- only 12 percent said they were satisfied or very satisfied with this service. White students reported a modest preference for working directly with four-year representatives, and Hispanic students appeared to prefer Transfer Center counseling to other services. With these exceptions, there were no important distinctions between ethnic groups in student satisfaction ratings among the different services offered. Table II-13 displays these student survey results.

These data suggest that the practice of providing multiple resources for students to obtain information was a successful strategy, given the wide range of student preferences.

Table II-13

Students Reporting They Were Satisfied or Very Satisfied with Transfer Center Services

	Overall	Workshops	Four-Year Representatives	TC Staff Counseling
Total	76%	52%	65%	63%
Asian	80%	45%	53%	63%
Black	87%	12%	59%	48%
Hispanic	69%	48%	47%	66%
White	75%	67%	75%	64%

Motivating Students

Transfer Center events were organized to motivate students to transfer by introducing them to four-year college faculty members, by explaining what career options were available in various majors or fields, and by taking community college students on tours of four-year college campuses. At all the Transfer Centers, special events were designed for black and Hispanic students; one Transfer Center designed a series of events for Native American students. A major goal of these events was to motivate students to transfer and to encourage those with a transfer goal to continue working toward that objective. The events were commonly planned around a major or career theme in conjunction with community college faculty or four-year representatives. For example, a Transfer Center sponsored a special career day for minorities who might be interested in engineering. Potentially interested students were identified from Transfer Center client records and from the community college database, and letters publicizing the events were sent to the identified students. Center staff also made follow-up phone calls to these students. At the event, minority engineering faculty at the four-year college made a presentation to community college faculty and students.

Helping With Articulation

The Transfer Center program contributed to progress in articulation. The Centers were focal points for raising and resolving disputes in articulation, and intersegmental cooperation built around the Transfer Centers contributed to the resolution of articulation problems. The Transfer Centers were an important means of disseminating articulation information to prospective transfer students, by providing them with direct access to articulation major sheets. Results from the student survey indicate that transfer students used the Transfer Center as an important source of information about majors requirements at four-year institutions.

b. Differences in Transfer Center Models

In the evaluation fieldwork three distinct models of Transfer Center service delivery were observed: Group, Individual, and Mixed. These models are discussed below.

Group Model

The Group model was used on twelve campuses. In this model, a Transfer Center activity was advertised on the campus, and letters were typically sent to students who had indicated at registration their interest in the topic to be addressed by that activity. For example, if the activity was a workshop on UC admissions, letters would go to students who has indicated their intention to transfer to UC. More intensive outreach was employed to contact minority underrepresented students -- for example, students would be identified from college records, called to be told about the event, and encouraged to attend. At the event, Center staff would collect students' names for inclusion in Transfer Center records to receive future mailings. No records were kept of individual students' histories of attendance.

In the Group model, the Transfer Center did not track the academic progress of its clients, and students who were failing courses were not identified specifically by Transfer Center staff. No special attempts were made to work with individual students; activities (e.g., tours of four-year universities, or special meetings organized by major to highlight career opportunities) were provided for groups of students.

When students applied to four-year institutions, the Transfer Centers using a Group approach served the students as a group with workshops on admissions requirements and procedures. Follow-up with individual applicants was performed only by four-year representatives.

Individual Model

The Individual model was found at four campuses. At these colleges, Transfer Center directors conceived of Center clients as a "caseload" of individual students whose progress toward transfer was carefully monitored. These Transfer Centers kept a record of individual student participation in Center activities. Events were advertised to the entire student body as well as to Center clients, and if students attended an event they would be added to the list of Transfer Center clients.

In the Individual model, the academic progress of all Transfer Center clients was tracked on an individual basis. Students in academic difficulty were identified by the counseling department, but the Transfer Center was notified if one of its clients was in academic trouble. The unit status of clients was also monitored, so that when students earned a certain number of units they were contacted about events and activities relating to transfer.

At these campuses, the application status of students applying to transfer was monitored both by the four-year representative and the Transfer Center staff. The four-year representative provided the Transfer Center with periodic updates on transfer applicants from the community college, showing the documents needed to complete the applications and the students' admission status. Students whose applications were incomplete were contacted by Transfer Center staff and encouraged to submit the required documents. Students denied admission were counseled by the four-year representative about alternative majors or colleges.

Mixed Model

The Mixed model was observed at four campuses. In this model, the Transfer Center used the Group approach with Asian and white students and the Individual approach with black and Hispanic students. Events were publicized to the entire student body, and special efforts via mail or telephone were made to encourage black and Hispanic students to attend. All students who attended Center events received the same information or service. However, whereas only names would be gathered for white and Asian students (to add them to the pool of Transfer Center clients) individual records would be kept on black and Hispanic student participation. Special Transfer Center events were also designed and implemented for black and Hispanic students. For example, one community college Transfer Center arranged a bus trip for 25 black and Hispanic students to visit a UC campus 250 miles away. The minority students were hosted by four-year college mentors who showed them the campus and stayed with them in college dormitories. None of the community college students had ever been to that UC campus.

Staffing at the Mixed model sites included a part-time counselor or four-year college student mentor assigned to work solely with the identified minority students. The director was responsible for the overall Center program and designed the group events; the part-time counselor designed specific events for minority underrepresented students and tracked the progress of individual students.

At the twelve colleges that adopted the Group Approach model of Transfer Center implementation, directors reported difficulty in reaching significant numbers of black and Hispanic students. Direct mail and telemarketing efforts to those students frequently failed without the assistance of staff specifically assigned to serve minority students. Four-year campus representatives placed a high priority on reaching such students and urged the development of more intensive outreach activities. Group Approach Transfer Centers were receptive to the efforts of the four-year representatives, and the practice of using four-year college student mentors to recruit minority underrepresented students became widespread in the last year of the Pilot Program. By 1988 several of the Group Approach Transfer Centers had begun to operate more like Mixed model Transfer Centers.

Both the Individual and Mixed model of Transfer Center service delivery provided individualized assistance to minority underrepresented students. Such individual assistance appeared to be a more successful approach than the Group model for reaching these students and providing them with Transfer Center resources. Table II-14 summarizes evaluation findings on the three models of Transfer Center implementation.

Table II-14

Models of Transfer Center Services
1988-89

	GROUP	INDIVIDUAL	MIXED
TRACKING ACADEMIC PROGRESS	NOT ON INDIVIDUAL BASIS	INDIVIDUAL TRACKING OF ALL CLIENTS	UNDERREPRESENTED MINORITIES TRACKED; OTHERS NOT TRACKED
MOTIVATING TRANSFER	INFORMATION PROVIDED TO GROUPS	COUNSELING AND FOLLOW-UP	UNDERREPRESENTED MINORITIES COUNSELING AND FOLLOW-UP; OTHERS SERVED IN GROUPS
ASSIST TRANSFER	INFORMATION TO GROUPS	TRACK STATUS BY NAME, TROUBLESHOOT	UNDERREPRESENTED MINORITIES ASSISTED; FOLLOW-UP PROVIDED; OTHERS SERVED IN GROUPS
NUMBER OF CAMPUSES	12	4	4

5. Components of a Successfully Implemented Transfer Center

Evaluation fieldwork revealed that successfully implemented Transfer Centers shared four common characteristics:

- They received administrative support from top campus administrators in both student services and instruction;
- They were staffed by personnel with the experience and training needed to manage the Center, market its services, integrate Center activities with other student services, and work with students;
- Center staff functioned effectively with their four-year counterparts; and
- Center directors and staff devoted the time and effort required to conduct successful outreach to underrepresented groups.

Administrative support from top level administrators was essential to the success of the Transfer Center. Support from the Chief Student Services Officer made it possible to integrate the Transfer Center with other student services (counseling, EOPS and Disabled Student Services) and enhanced the Center's access to student data systems. Administrative support from the Chief Instructional Officer encouraged active faculty participation in the identification of potential transfer students as well as faculty involvement in special events organized around a particular career or major field. The Chief Instructional Officer played an important role in the identification and resolution of articulation issues with four-year colleges and helped set the overall campus tone regarding the transfer function as a priority mission of the college.

Successful Transfer Center directors excelled at marketing their Center's services to faculty, staff and students on the community college campus, and to four-year colleges. Classified staff at successful Centers established an inviting environment which allowed first generation college students to ask questions and explore possibilities without fear of making a mistake.

Aside from their sales skills, successful Transfer Center directors were skilled at cooperative planning with four-year colleges and with their colleagues on the two-year campus. They often used campus advisory committees to draw in influential faculty and staff to Transfer Center planning and implementation. They were also good managers capable of setting priorities and implementing them when faced with myriad demands.

Finally, successful Transfer Center staff devoted considerable time and effort to recruiting underrepresented students. This required that Center efforts not be diluted with extra responsibilities, such as the director counseling a regular load of students or serving as campus articulation officer. Outreach to the underrepresented student population required constant effort and collaboration with faculty and student services staff at the community college and with four-year college representatives.

Evaluation fieldwork conducted in 1987-88 at eight community colleges elicited the views of campus faculty and administrators about components of a successful Transfer Center. At over half of the campuses interviewees cited the support provided to the Transfer Center by high-level community college administrators, and the integration of the Transfer Center into Student Services. Other components identified as important were the sales skill of the Transfer Center director, having articulation agreements in place, a strong advisory committee composed of community college faculty and staff, a good campus location for the Transfer Center office, and adequate clerical support.

6. State Role

The Chancellor's Office, California Community Colleges, was responsible for state oversight of the Pilot Program. Community colleges in the project were visited twice each year by the Transfer Center Coordinator in the Chancellor's Office. At each campus, the coordinator observed the Transfer Center program in operation, interviewed faculty, staff and students, and provided an exit briefing to top level campus management on the strengths and weaknesses of that college's Transfer Center. According to Transfer Center directors, these visits helped to identify problems and develop strategies for their solution. The Chancellor's office also sponsored conferences on Transfer Center implementation and intersegmental articulation. Our campus interviews revealed that these conferences were valued by community college and four-year campus participants as opportunities to learn about approaches being developed or implemented by their colleagues at other campuses.

7. Summary of Key Findings and Remaining Issues -- Community Colleges

This section summarizes the key findings discussed in this chapter, and identifies some continuing issues for the program.

a) All Transfer Centers became fully operational and met state plan goals.

All twenty colleges fully implemented the concept of Transfer Centers set forth in the April 1985 intersegmental plan. The colleges hired directors, established physical locations for the Centers, and provided the Centers with logistical support. The Centers identified potential transfer students and provided them with services as required by the state plan. The community colleges also engaged in intersegmental cooperative efforts with the four-year campuses with whom they applied to the state. (Intersegmental efforts are discussed in greater detail in section C, below.)

b) Supportive administrative environments aided effective Transfer Center implementation.

The Transfer Centers were established within wider campus contexts that influenced their activities. A number of factors in the campus environment were important.

Transfer Centers did not operate efficiently until they had been fully integrated into campus student services units.

Transfer Centers were introduced on community college campuses that already offered many student services, such as EOPS, enabler services for disabled students, and counseling departments. Problems occurred when efforts were made to integrate the Transfer Center into these student services functions. The most common problems were unclear role definitions and competitiveness between the counseling department and the Transfer Center. Difficulties integrating the Transfer Centers with other student services units slowed the process of identifying and serving potential transfer students.

Multiple duties diluted Transfer Center directors' focus on transfer.

Ten Transfer Center directors reported that they had additional assignments in addition to directing their Centers. These additional duties detracted from the time the Transfer Center directors could devote to outreach activities aimed at underrepresented students, and made it harder for the directors to identify potential transfer students who did not identify themselves at registration.

Successful Transfer Center implementation required top level campus administrative support.

On twelve of the twenty campuses, two of the three top level administrators actively supported their Transfer Centers. Top level campus administrators often viewed the Transfer Center as one means of re-affirming or re-invigorating the transfer function on their campuses. This support helped directors to clarify their roles, obtain cooperation from other student services units, and resolve operational problems.

Direct reporting relationships to senior administrators facilitated successful implementation.

Transfer Center directors who reported directly to the Chief Student Services Officer enjoyed greater access and administrative support within their student services units than did those who reported through a Director of Counseling to the Chief Student Services Officer.

Lack of training and administrative inexperience slowed the efforts of many Transfer Center directors to develop efficient Center operations.

Most Transfer Center directors had been community college counselors; few received any training for their new positions. This lack of training and management experience slowed the process of resolving conflicts with other student services units, and hampered the organization of Transfer Center operations.

c) **Where administrative environments were supportive, Individual and Mixed approaches were most successful in identifying and serving minority underrepresented students.**

Several community colleges with fewer than 5,000 students and more than 40 percent black and Hispanic enrollment employed an Individual model of Center operations, in which Center clients were served on an individual basis. Administrative support on these campuses was consistently high, and role conflicts among student services units were minimal.

The challenge for the Individual model Transfer Center was to support the academic progress of potential transfer students. Four-year representatives concentrated on motivational activities to encourage students to transfer, and on faculty exchanges between two- and four-year college faculty in related disciplines, to increase mutual understanding and respect.

A Mixed Approach model was used effectively by several larger community colleges with over 10,000 students and 15 to 20 percent black and Hispanic enrollment; this model served Asian and white students at the group level and black and Hispanic students on an individual basis. At these colleges, administrative support was very high, which enabled the Transfer Center director to focus attention on a more complex approach to delivery of Transfer Center services. Articulation agreements were either in good working order on these campuses, or a person other than the Transfer Center director managed articulation. This model relied on access to student information data systems to identify potential Transfer Center clients, and to track participation of individual students on either the college's main database or on a Transfer Center personal computer.

d) A campus-wide focus on transfer aided Transfer Center implementation.

At colleges with a strong tradition of emphasis on transferring students to four-year institutions, the Transfer Center was introduced to a receptive campus environment, where it was relatively easy to attract faculty and some segments of the student body to Transfer Center events. The status of articulation between the college and nearby CSU and UC campuses was generally well developed and, with modest additional effort, the Transfer Center could begin wider dissemination of articulation agreements to students.

e) Faculty involvement in the program helped Transfer Centers to meet their goals.

Faculty assisted Transfer Centers by helping to identify and refer potential transfer students, and by meeting with four-year faculty in order to highlight career and transfer opportunities in their fields.

The majority of Transfer Centers experienced difficulty in obtaining active faculty involvement in the program. On five of the campuses, high levels of faculty involvement were observed, due for the most part to active intervention by the Chief Instructional Officer. On campuses with traditionally low levels of cooperation between student services and academic affairs, the Transfer Center had difficulty overcoming those barriers.

f) The Transfer Centers contributed to progress in articulation among participating colleges.

Colleges with highly developed articulation agreements at the start of the Transfer Center program had a head start over colleges that had to develop new agreements or update old agreements with their four-year partners.

During the first year of the Pilot Program, eight Transfer Center campuses reported serious articulation problems with their

UC and/or CSU partners. By the end of the Pilot Program, however, complete breadth and general education agreements existed among all the Transfer Center community colleges and the UC and CSU campuses they applied with in the Pilot Program. Significant transfer majors were complete in all but one case.

The Transfer Center program contributed to this progress in articulation. The Centers were focal points for raising and resolving disputes in articulation, and intersegmental cooperation has contributed to the resolution of articulation problems.

g) Clear state direction and oversight helped Transfer Center directors understand program objectives and solve problems.

The community college Chancellor's Office maintained a high level of contact with the campuses, particularly in the first two years of the program. Colleges received guidance on program implementation, state level expectations were clarified, and solutions developed to common problems were widely disseminated by the state Transfer Center Coordinator.

h) Most Transfer Centers learned and changed over the course of the Pilot Program.

The Transfer Center program evolved on most of the community college campuses over the course of the three-year pilot phase. Though there were many problems in the early stages of the pilot, progress was eventually made in clarifying the roles and responsibilities of Transfer Center directors, and in integrating Transfer Centers with other student services.

By the end of the third year of the Pilot Program the Transfer Center directors reported feeling confident of their roles, their positions on the campus, and their relationships with associated four-year institutions. Many had increased their efforts to recruit underrepresented minority students; several had modified their operations to include more individual approaches to student identification and recruitment.

i) Some Transfer Center issues were not fully resolved at the conclusion of the Pilot Program.

At the conclusion of the Pilot Program, improvements were still needed in several areas of Transfer Center operations: counseling services and student information systems at community colleges, collaborative outreach efforts to underrepresented minority students, and articulation of majors.

Counseling improvements were still needed.

The availability of timely, accurate information needed for academic planning for community college transfer students remained a significant challenge for the community colleges. Four-year institution staff often expressed concern about the large number of units taken by community college transfer students, their apparent misinformation about four-year campus, requirements and the large number of units that were not accepted for transfer. This confusion was assumed to be due to lack of counseling, inadequate articulation between two and four-year colleges and/or inadequate dissemination of articulation information by counselors. Largely as a result of the frustration among four-year college representatives about students' confusion over admission requirements, some of the four-year representatives initiated special training activities for community college counselors. Many four-year representatives preferred to counsel students early in their community college careers about admissions policies, articulation agreements, academic standards and other matters necessary for transfer.

Some improvements in counseling do appear to be underway. With the infusion of state matriculation funds, additional counseling staff are being added and new referral policies are being adopted through which students are required to receive counseling prior to enrolling in college courses. In addition, dissemination of articulation agreements directly to students was increased during the Pilot Program. Rather than relying on community college counselors to disseminate complex articulation information orally to students, it was increasingly common for community college Transfer Centers to provide students with written copies of articulation agreements showing entrance requirements for a particular four-year college or university, with relevant community college courses numbers and titles.

More work was needed to reach less-motivated students.

Outreach to students who did not identify themselves as interested in transfer, and/or had low motivation to continue their educations -- particularly minority underrepresented students -- remained a challenge for all of the Transfer Centers. Efforts to reach such students were found at some but not all of the Pilot Program campuses. Successful outreach efforts were characterized by access to student records at the community college, collaboration with four-year institutions' outreach efforts and a consistent high level of effort. Many Transfer Centers provided personalized services to black and Hispanic students who wanted to continue their educations but had academic, financial or other problems. The more difficult task was identifying and motivating students who did not think of themselves as candidates for a baccalaureate degree, and did not participate in Center activities in response to campus outreach efforts. It was particularly difficult to identify and motivate these students without active faculty participation and special efforts by counselors.

Articulation of majors was not complete.

The articulation of majors continued to be an area of concern for Transfer Centers. Articulation of majors between the faculty of the respective institutions, assisted by campus administrators, was a slow process. Systematic progress was achieved, but as of 1988-89 not all majors at the Pilot Program colleges were fully articulated.

B. IMPLEMENTATION AT FOUR-YEAR INSTITUTIONS

The Transfer Center Pilot Program was conceived as an intersegmental project in which community colleges would collaborate with CSU, UC and independent four-year institutions to increase the numbers of transfers from community colleges. According to the state plan, the role of the four-year institution was to assist the community college Transfer Center in serving potential transfer students, provide coordinated institutional support to University staff working with Transfer Centers, and make appropriate four-year faculty and staff available for Transfer Center efforts.[18]

Eighteen of the twenty-two UC and CSU campuses participating in the program were visited during the evaluation. Seven CSU campus were visited in spring 1987, as were four UC campuses. In spring 1988, four CSU campuses and three UC campuses were visited.

Fieldwork visits explored how the four-year colleges implemented the Transfer Center Program, and the impact on Transfer Center implementation of four-year campus articulation and admissions policies. Evaluation findings on this aspect of the Pilot Program are presented below.

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[18] California Community Colleges, California State University, and University of California, "A Plan For Implementing the Transfer Center Pilot Program" (Sacramento: April 1985), p. A-11.

1. Administrators' Goals

The goal of the Transfer Center program, expressed in the state plan, was to increase all transfers with an emphasis on underrepresented students, defined as black, Hispanic, Native American, disabled and low income students. Interviewees at community colleges and four-year colleges in most cases interpreted "underrepresented students" to mean black and Hispanic students. At two community college, interviewees also focused on Native American students. Thus, the operational definition of "underrepresented" students in the Transfer Center Program became minority underrepresented students, or blacks and Hispanics.

The goals of the four-year institutions in the program were discussed in evaluation fieldwork interviews with the program coordinators at each campus, and with campus student services and academic administrators. Data collected during 1986-87 fieldwork were re-checked in 1987-88.

Administrators at five UC and five CSU campuses generally felt that the goal of the Transfer Center program was to increase all transfers with an emphasis on black and Hispanic students. This view was consistent with the views of most participating community college administrators. At six CSU and two UC campuses, administrators expressed the somewhat narrower view that the program goal was to concentrate solely on black and Hispanic transfers.

This difference between community colleges and these eight four-year campuses in perceived program goals may account for the greater sense of urgency toward outreach to minority students that was evident on the part of a number of four-year Transfer Center representatives; their expectations led them to concentrate more on collaborative efforts to locate and motivate minority student transfer candidates.

2. Program Organization and Administration

a. Role of the Coordinator

Transfer Center programs at four-year institutions were organized in two patterns. The most common pattern, observed at nine CSU and four UC campuses, was for a member of the college's outreach staff to be the single responsible coordinator of the program for the campus. The coordinator was responsible for planning and implementing activities with the community college Transfer Center as well as serving as the campus liaison to the segmental office for Transfer Center matters. The coordinator also attended Transfer Center meetings hosted by INTER-ACT or segmental offices.

A second pattern was observed at three UC and two CSU campuses, where a Transfer Center coordinator served as liaison to the segmental office for the program, but actual visits to community college Transfer Centers were conducted by outreach staff in other student services units. In several cases of four-year institutions with this type of Transfer Center organization, community college staff felt that the four-year college sent untrained representatives who were unable to answer students' questions. During the course of the Pilot Program, one CSU and one UC campus changed from this pattern to the more common pattern described above of a single responsible coordinator.

All of the four-year campus coordinators were experienced four-year college outreach or admissions staff.

b. Organization

The four-year institutions placed the Transfer Center program within their student services administrative areas. The reporting relationships of the Transfer Center Coordinators are shown in Table II-15.

Table II-15

Organizational Placement
Four-Year Transfer Center Program
1987-88

Coordinator Reports to	Number of Campuses		
	UC	CSU	Total
Relations with schools or Outreach	3	8	11
Admissions Office	2	1	3
Other Student Services	2	2	4
Total visited	7	11	18

c. Logistical Support

In order to conduct program activities (described in the next subsection) four-year Transfer Center program staff required some functional support from their campuses. Five areas of functional or logistical support were identified in the evaluation fieldwork:

- Articulation Major Sheets. Articulation major sheets explain four-year college entrance requirements and major prerequisites in terms of specific community college courses. They were prepared by the four-year institution based on official articulation agreements, and were given directly to community college students.

  Major sheets were needed for the academic advising component of Transfer Center activities.

- Admissions Data. Admissions data on the status of community college transfer applications showed the applicant's name, application status, ethnicity and any missing documents. This data was used for applicant follow-up of individual students by either the four-year staff or the community college Transfer Center director. Phone contact with admissions personnel on the four-year campus was used in the academic advising component.

- Admissions Evaluators. If a student asked a four-year representative "Will I be admitted to your college?" the answer could be given with certainty only by a trained admissions evaluator. Four-year Transfer Center representatives required access to trained evaluators in order to conduct academic advising. Access to an evaluator was provided in a number of ways: (1) by using an evaluator as the four-year representative visiting the community college campus; (2) by scheduling certain times on the four-year campus or the community college for evaluators to consider individual applicants; or (3) by making evaluators available to the four-year Transfer Center representative, to review individual cases. The Transfer Center representative would communicate the results to the student.

- Faculty Availability. In order to arrange meetings between two- and four-year faculty, the Transfer Center staff at the four-year college required cooperation from faculty on their campus.

Significant progress was achieved during the course of the Pilot Program in four-year institutions' logistical support for the Transfer Center effort. In 1986-87, several elements of logistical support for Transfer Center activities were missing at a number of four-year institutions. Articulation major sheets, access to admissions data, and faculty availability were present at eight of the eleven four-year institutions visited that year. Access to admissions evaluators was available at six of the eleven campuses and absent at five.

Progress on developing logistical support for Transfer Center coordinators was rapid in both segments, and by 1987-88 all but two institutions had articulation major sheets and access to admissions evaluators, and all but one provided access to admissions data. Four-year faculty were available to community college faculty at thirteen of the eighteen four-year campuses visited during the evaluation. In all but a few isolated cases, complete logistical support from the four-year institution was present by the end of the Pilot Program. This logistical support helped the community colleges and four-year Transfer Center representatives to implement the applicant follow-up and academic counseling components of the Transfer Center program. Tables II-16 and II-17 summarize these findings for UC and for CSU.

3. Program Activities

The Transfer Center program at four-year institutions had five components: academic advising, workshops on admissions procedures, applicant follow-up, training community college staff, and joint faculty activities. The program was one of many ongoing efforts on these campuses to strengthen the transfer function and enhance the success of underrepresented minority students. This subsection describes the components of the program and its relationship to other transfer initiatives.

a. Academic Advising

Four-year Transfer Center program representatives visited the community college Transfer Centers on regular schedules, varying from weekly to monthly. These schedules were developed in cooperation with the community college Transfer Center directors. Community college Transfer Center staff publicized the representative's availability to see students for individual appointments (usually thirty minutes). On the day of the visit, the four-year representative received a roster of student appointments and the student transcripts. The Transfer Center provided a private office and telephone. The four-year representative disseminated articulation information to the students, advised students on admissions policies and procedures, and solved particular problems for applicants by directly contacting the four-year college admissions office. A typical four-year representative would see 10 to 15 students per visit. This component was implemented by all four-year Transfer Center programs.

Table II-16

Logistical Support for UC Transfer Center Staff

	Number of Campuses			
	1986-87		1987-88	
Support	Present	Absent	Present	Absent
Articulation Major Sheets	3	1	7	0
Access to Admissions Data	3	1	7	0
Access to Admissions Evaluator	1	3	7	0
Faculty Availability	2	2	3	4

Table II-17

Logistical Support for CSU Transfer Center Staff

	Number of Campuses			
	1986-87		1987-88	
Support	Present	Absent	Present	Absent
Articulation Major Sheets	5	2	9	2
Access to Admissions Data	4	3	10	1
Access to Admissions Evaluator	5	2	9	2
Faculty Availability	6	1	10	1

Over the course of the Pilot Program, two four-year campuses reduced their level of effort and frequency of visits to participating community colleges. In these cases, and even where the four-year college level of effort remained high, some community college staff reported a concern that the four-year institutions' commitment to cooperation could dissipate once the Pilot Program ended.

b. Workshops

During the fall and spring, four-year representatives conducted workshops at the community college Transfer Centers on four-year campus admissions policies and procedures. The workshops covered application forms and deadlines, and addressed students' specific questions. The community college Transfer Center publicized the event, provided space for the meeting and helped to follow up on students' specific inquiries.

Depending on the size of the community college, these workshops served 20-50 students in a single session. All of the four-year Transfer Center programs implemented this component.

c. Applicant Follow-up

Applicant follow-up consisted of individual assistance to transfer applicants. Transfer Center coordinators from four-year campuses periodically provided lists to the community college Transfer Center directors, showing the admission status of their transfer applicants. Some four-year representatives also provided lists showing missing documents, if any, and student ethnicity.

At the community college Transfer Centers utilizing Individual or Mixed models of service, staff at either the four-year or community college contacted minority students with missing documents to encourage them to complete their applications. At Centers pursuing a Group approach this follow-up, if done at all, was performed by the four-year representative -- who typically placed higher priority on follow-up for minority applicants.

In order to implement this component of the program, the four-year representative required timely access to admissions data. One UC and three CSU campuses among the eleven four-year Transfer Center programs visited in spring 1987 lacked effective access to admissions data and did not provide applicant follow-up. By the end of the Pilot Program all but two CSU and two UC campus coordinators among the 18 four-year Transfer Center programs visited had access to admissions data and provided applicant follow-up.

d. Training Community College Counseling Staff

In evaluation interviews, the accuracy and timeliness of information provided to community college transfer students was identified as a major concern by four-year campus outreach staff on all 18 campuses. According to respondents, community college students seen in individual counseling appointments frequently had a large number of non-transferable units, or courses outside a general education or breadth pattern. We were told that students were frequently confused about the courses they needed in order to transfer. This confusion could have been due to lack of counseling, inadequate articulation and/or inadequate dissemination of articulation agreements. Until the recent implementation of the community college matriculation program, many community colleges did not require students to receive counseling prior to enrolling in courses. Students preparing to transfer could take courses for four or five years without the benefit of academic planning with a counselor. Alternatively, articulation between a four-year college and community college may not have been complete or up-to-date. In such cases, students may not have been able to obtain the necessary information from their counselors. Or, current articulation agreements may not have been disseminated or explained to students by a counselor.

Since four-year college requirements were complex and changed frequently, it was a challenge to community college counseling departments to disseminate accurate, timely advice to potential transfers, even when comprehensive articulation agreements were up to date. To address this problem, four-year Transfer Center representatives at five UC and four CSU campuses trained community college counselors on current admissions policies, applications procedures and articulation agreements. The training, done on an annual basis, represented an extension of previous outreach efforts by the four-year colleges to community college counselors. This activity required both a high level of trust between cooperating colleges and a four-year representative with sufficient expertise to conduct the training sessions.

e. Faculty Activities

Four-year faculty often participated in Transfer Center activities with community college faculty in related disciplines. Development of articulation agreements for majors often necessitated faculty-to-faculty dialogue about community college course content and four-year college requirements. The articulation officers of the two- and four-year colleges made arrangements for these meetings. In many cases, The Transfer Centers helped to facilitate this contact by sponsoring joint faculty meetings, luncheons or informal gatherings. In addition, Transfer Center four-year representatives often involved four-year faculty in special meetings with community college faculty in related disciplines. These meetings were designed to explain transfer opportunities and career options available in major fields. The meetings were viewed by four-year Transfer Center staff as important motivational activities for minority students, who were able to talk to four-year faculty and learn about career and transfer opportunities. For example, the Transfer Center coordinator at a four-year university jointly planned an all day Saturday meeting with four-year business faculty and black community college students majoring in business. The 50 or so students who attended met the four-year faculty with whom they would be studying when they transferred. In the words of the Transfer Center coordinator, "They [the students] could see the light at the end of the tunnel. We ask them to take general education courses for two years before they come to us and this kind of activity renews their motivation to keep on working toward the major."

This meeting required coordinated planning with the Transfer Center at the community college to identify black business majors interested in this four-year campus. It also required the ability of the four-year Transfer Center coordinator to gain cooperation from four-year faculty.

Faculty activities were a component of all but one CSU Transfer Center program and four of the seven UC Transfer Center programs visited in the evaluation fieldwork. During these visits, faculty from business and engineering departments were interviewed on six CSU campuses, and faculty from other academic areas were interviewed on three UC and four CSU campuses. Four-year faculty who participated in Transfer Center activities gave two primary purposes for their involvement. First, they wanted to be sure that complex prerequisites were well understood by community college students interested in transfer. This was particularly important for business and engineering faculty, the two most sought-after transfer majors. Second, faculty wanted to encourage minority transfers in order to increase the number of upper division minority students on their campus. Faculty interviewed for the evaluation were well aware of the problem of underrepresentation of minorities in higher education.

The activities of the four-year Transfer Center programs in 1987-88 are summarized in Table II-18.

Table II-18

Four-Year Transfer Center Activities

1987-88

	UC	CSU	Total
(1) Workshops	7	11	18
(2) Academic Advising	7	11	18
(3) Applicant Follow-Up	5	9	14
(4) Training	5	4	9
(5) Faculty Activities	4	10	14
Total Campuses Visited	7	11	18

4. Other Transfer-Related Activities

The four-year campuses that participated in the Transfer Center program all conducted other efforts to enhance transfer. These efforts varied in scope and approach, often involving partnerships between a four-year institution and a community college for outreach and support services to minority students. Some of these outreach programs were implemented by staff jointly funded by the four-year college and the community college. One university had developed a large scale transfer program with community colleges in the region, including a special transfer curriculum, support services and guaranteed admissions status to participants. Several Transfer Center colleges participated in that program.

Some of these established efforts served as springboards for the four-year Transfer Center effort; relationships developed in joint outreach programs were a strong basis for cooperation in the Transfer Center program. The large scale transfer program at the university described above, for example, served as a resource for four-year faculty involvement in the community colleges with Transfer Centers. In some cases, however, established efforts were not an asset to Transfer Center implementation, due to competition between existing outreach programs and Transfer Center programs on the four-year campuses.

5. Summary of Key Findings -- Four-Year Institutions

Twenty-two public four-year institutions participated in the Transfer Center program: eight UC campuses and fourteen CSU campuses. Eighteen of the twenty-two participating colleges were visited once during evaluation fieldwork. This section summarizes the evaluation's key findings regarding the implementation of the Transfer Center Pilot Program at four-year colleges.

a) All participating four-year colleges visited during the evaluation implemented the workshops and academic advising components of the program; other program elements were implemented less consistently.

Four-year college Transfer Center programs consisted of (1) application workshops for community college students, conducted at community college Transfer Centers, (2) individual academic advisement for community college students, (3) applicant follow-up for community college students applying to four-year colleges, (4) training for community college counseling staff on current four-year college admissions policies and articulation agreements, and (5) faculty activities in which four-year college faculty met with community college faculty in related disciplines.

b) Differences among four-year campuses in the degree of emphasis placed on outreach to black and Hispanic students were associated with differences in the way four-year administrators perceived Transfer Center program goals.

The goal of increasing all transfers with an emphasis on minority underrepresented students was shared by most community college administrators, and by four-year college administrators at ten of the 18 four-year colleges visited in the evaluation fieldwork. Staff at eight four-year colleges expressed a narrower goal of increasing solely black and Hispanic transfers. These staff had a greater sense of urgency toward outreach to minority students than that expressed by their community college counterparts. Four-year Transfer Center staff who were concerned mainly with black and Hispanic student transfer focused more heavily on collaborative outreach efforts to locate and motivate minority student transfer candidates.

c) Logistical support from four-year institutions was necessary for effective implementation of Transfer Center activities.

Four kinds of logistical support were needed to implement Transfer Center activities: Articulation major sheets, admissions data and access to admissions evaluators were needed for the academic advisement component of the program. Cooperation from faculty was needed to implement faculty activities. In all but a few cases, complete logistical support from the four-year institution was present by the end of the Pilot Program.

d) There were isolated problems in the implementation of the four-year college Transfer Center Program.

While all the Transfer Center coordinators at the four-year colleges brought experience as outreach and admissions personnel to the program, at five colleges the coordinator did not actually conduct visits to community college Transfer Centers. In these cases, the coordinator sent various student services staff from other units to the community college. These representatives (who were sometimes college students themselves) were often unable to answer community college students' questions. Two of these five colleges changed to a coordinator visitor model during the Pilot Program, and abandoned the multiple visitor approach.

Toward the end of the Pilot Program, there were isolated cases of reduced levels of effort by four-year colleges. These problems were rare; most four-year colleges sustained their effort throughout the program implementation period.

C. INTERSEGMENTAL COOPERATION

1. Campus-to-Campus Activities

Intersegmental cooperation among community college and four-year college staff was an essential feature of the state plan for the Transfer Center Pilot Program. Transfer Center annual schedules of activities were planned cooperatively between the community college Transfer Center directors and the four-year campus Transfer Center coordinators. For workshops on application procedures and admissions policies, for example, the Transfer Center at the community college publicized the event, contacting potential transfer students by mail or phone. The four-year representative conducted the workshops, disseminating information on application deadlines, handing out forms, and answering students' questions. For individual counseling, Transfer Center staff at the community college publicized the availability on campus of a four-year representative, contacted students who might be interested in that college (as identified on the Transfer Center database), and provided a schedule of appointments for the four-year representative, a private place to meet with the students, access to a telephone, and the transcripts of the students who were scheduled for the appointments.

An example of in-depth intersegmental cooperation was collaborative outreach to black and Hispanic underrepresented community college students. Black and Hispanic students who identified themselves at registration as interested in transfer were typically entered in the community college's Transfer Center database. Some Transfer Centers went beyond this approach to recruit minority students through cooperative efforts between the community college staff and the four-year college representatives. The four-year representative, with the assistance of the Transfer Center director, spoke to students in freshmen-level transfer courses about potential transfer opportunities and Transfer Center services. Occasionally, a four-year college hired minority transfer students on its campus to return to their community college to recruit students for the Transfer Center.

Intersegmental cooperation observed in the Transfer Center program extended beyond the activities of the Transfer Center itself. Improved relationships among campus level administrators with related duties at cooperating institutions often helped resolve problems related to admissions policies and procedures, articulation issues, and other matters of importance to the transfer function. Sometimes improved relationships were found among community colleges and four-year colleges that were far apart geographically and might not have had a strong transfer relationship prior to the Transfer Center program. In other cases, improved relationships occurred among colleges in close proximity where problems with articulation or with admissions policies and procedures had caused difficulties in prior years. In such cases, the required intersegmental cooperation aspect of the Transfer Center program brought administrators into closer contact to develop a shared agenda for transfer. The comment of one four-year campus high level administrator was typical. "I never realized how far apart we'd grown from our community college down the road, which sends us hundreds of transfers each year. The Transfer Center program helped us build much better relationships. I never want to go back to the 'bad old days'."

Some problems in intersegmental relations remain: Two four-year colleges reduced their level of effort over the course of the Pilot Program, and some sent untrained representatives visit community college Transfer Centers. These were isolated problems, however. On the whole, intersegmental cooperation met or exceeded state expectations.

2. Transfer As A Regional Phenomenon

Transfer is a largely regional phenomenon; the vast majority of community college transfers enter CSU and UC campuses near their community college. We learned that regional Transfer Center cooperative activities extended beyond the three colleges (a CCC, CSU and UC campus) that jointly submitted their Pilot Program application to the state. Instead, clusters of two and four-year colleges cooperated in a regional transfer milieu. Some community colleges and four-year institutions operated in more than one cluster. Table II-19 displays the regional cooperative clusters observed in the Transfer Center Pilot Program.

Four-year college staff often visited community colleges in their cluster that were not part of their original application. Joint events were planned and implemented among several community colleges and four-year colleges within the cluster. New articulation agreements were developed within the clusters. The depth and breadth of regional cooperation within the clusters grew during the course of the Pilot Program.

3. Problem Resolution

The state intersegmental plan included a mechanism for the resolution of problems arising between participating colleges. The plan called for four-year campuses to raise serious intersegmental issues with their systemwide offices for resolution with the Chancellor of the community colleges. Examples of serious issues in the Pilot Program included: (1) A community college allowed its Transfer Center director position to remain vacant for six months, while nearly all Transfer Center functions ceased. (2) A community college closed its Transfer Center during the summer, at a time when the four-year college had planned activities for the Center and (3) A four-year college stopped visiting a Transfer Center community college. These problems meant that a component of the Transfer Center program was not being implemented, or a hiatus in Transfer Center activities. While the incidence of such issues among cooperating two and four-year colleges was low, their resolution did not follow original state plan guidelines. The CSU and UC campuses did not utilize their system level offices to resolve such problems with community colleges. Instead, four-year campus representatives sought help from the CCC Chancellor's Office, which had no authority to deal directly with individual four-year colleges.

Table II-19

Regional Clusters Observed in the Transfer Center Pilot Program

	Cluster	UC Campus	CSU Campus	CC
1.	Bay Area	Berkeley	San Francisco Hayward	SFCC Laney
2.	Sacramento	Davis	Sacramento	American River Cosumnes Sac City
3.	Fresno	Santa Cruz	Fresno	Fresno City
4.	Santa Barbara	Santa Barbara	Cal Poly SLO	Santa Barbara
5.	LA County	UCLA	Los Angeles Northridge	East LA LACC Santa Monica Compton
6.	Pomona/ Riverside	Riverside UCLA Fullerton	Cal Poly San Bernardino	Citrus Mt. Sac San Bernardino Valley
7.	Orange	Irvine	Fullerton Cal Poly Pomona	Cerritos Mt. Sac Citrus
8.	San Diego	San Diego	San Diego	Imperial Valley Palomar Southwestern
9.	North Coast	Berkeley	Humboldt	Redwoods
10.	Bakersfield	Santa Barbara	Bakersfield	Bakersfield

The most common approach to resolving problems was through discussions between higher level campus administrators from the community college and the four-year institution. The case of the four-year college that ended its participation in Transfer Center activities at a community college was resolved in this fashion. Some problems were also successfully resolved in advisory committee deliberations. For example, two four-year institutions, a CSU and a UC campus, expressed concern that a Group Approach Transfer Center was not giving sufficient attention to underrepresented minority students. An advisory committee meeting was devoted to a discussion of the problem and development of plans for collaborative outreach.

III. DESCRIPTIVE PROFILE OF TRANSFER STUDENTS

This chapter describes characteristics of transfer students from all community colleges in the state, both from state funded Transfer Center (SFTC) and other colleges, that were admitted to UC or CSU in 1986-87 1987-88, the second and third year of the Pilot Program. The information on community college transfers, which was obtained from segmental offices for UC and CSU, provides descriptive data on the gender, ethnicity, total transferable units, grade point average and enrollment status of transfers in 1986-87 and 1987-88. The data for both UC and CSU is for a full year of transfer students and allows us to contrast admits from SFTC colleges to admits from other colleges.

A. COMPARISON OF SFTC TO OTHER COLLEGES

1. Gender

In both 1986-87 and 1987-88, transfer admits to UC and CSU from both Pilot Program and other colleges were about evenly divided between men and women, with CSU enrolling slightly higher proportions of women. Tables III-1 and III-2 show these data.

Table III-1

Gender of Transfer Admits

1986-87

	Percent Female	
Admits to:	SFTC Colleges	Other Colleges
UC	50%	49%
CSU	53%	52%

Table III-2

Gender of Transfer Admits

1987-88

	Percent Female	
Admits to:	SFTC Colleges	Other Colleges
UC	49%	50%
CSU	53%	52%

2. Ethnicity

The ethnicity of transfer admits from SFTC and other colleges is shown in Tables III-3 and III-4 for both years and both segments. Because the SFTC colleges as a group had higher minority enrollments, we would anticipate that their transfer admits would show a higher representation of black and Hispanic students and a lower proportion of white students.

These tables confirm that Asian, black and Hispanic students were more heavily represented in the transfers from Pilot Program colleges than from other colleges in both years for both segments. For UC, minority students in the transfer population increased from Transfer Center colleges. For other community colleges, the proportion of black transfers remained stable and the proportion of Hispanic transfers increased slightly.[19]

3. Total Transferable Units

At the time of enrollment to a four-year college, a community college transfer student's total transferable units are calculated by the receiving institution. Tables III-5 and III-6 show the number of transferable units enrollees had at the time of transfer, as determined by the receiving UC or CSU campus. These tables report data only on enrollees; students who were admitted but did

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[19] Between 1986-87 and 1987-88, the number of transfer students admitted to UC without ethnic identification declined, which may account for part of the increase shown for all ethnic groups at UC in 1987-88.

Table III-3

Ethnicity of Transfers

1986-87

Percent of Total Transfers

	SFTC Colleges		Other Colleges	
	UC	CSU	UC	CSU
Asian	16.9%	15.8%	14.1%	10%
Black	3.7%	8.5%	2.9%	5%
Hispanic	11.1%	13.7%	8.5%	9%
White	58.2%	57.9%	64.0%	72%

Table III-4

Ethnicity of Transfers

1987-88

Percent of Total Transfers

	SFTC Colleges		Other Colleges	
	UC	CSU	UC	CSU
Asian	17.3%	15.5%	13.5%	10.6%
Black	3.9%	7.9%	2.9%	5.4%
Hispanic	11.7%	15.5%	8.7%	9.1%
White	59.8%	57.0%	67.8%	71.5%

Table III-5

Total Transferable Units of Transfer Enrollees

1986-87

	SFTC Colleges		Other Colleges	
Total Units	UC	CSU	UC	CSU
Less Than 30	9%	7%	9%	6%
31-52	6%	14%	7%	16%
52-70	14%	43%	18%	49%
71-100	49%	21%	44%	18%
Over 101	22%	15%	22%	13%

Table III-6

Total Transferable Units of Transfer Enrollees

1987-88

	SFTC Colleges		Other Colleges	
Total Units	UC	CSU	UC	CSU
Less Than 30	8%	7%	8%	6%
31-52	8%	16%	7%	15%
52-70	16%	26%	20%	48%
71-100	47%	30%	44%	19%
Over 101	21%	21%	21%	12%

not enroll are not shown.

Students who enrolled as transfers at UC in both 1986-87 and 1987-88 had more units than those who enrolled at CSU, regardless of whether they were admitted from a Pilot Program or other college. Enrollees in both segments from Pilot Program colleges also had more transferable units than did enrollees from other colleges, in both years. There was a particularly wide difference for CSU in 1987-88, when 51 percent of their enrollees from Pilot Program colleges had more than 71 transferable units, compared to 31 percent of CSU enrollees from other colleges. Information on the extent to which transfer admits had satisfied lower division breadth and general education requirements was not available on the segmental databases so we do not know what proportion of these transferable units were applied to satisfying these lower division requirements. The difference between the segments on the numbers of transfers enrolling with a high number of transferable units may reflect a difference in admissions policies. As a rule, UC campuses prefer transfer students to complete or nearly complete their breadth requirements for lower division prior to transfer. CSU accepts transfer student with 56 transferable units who have not completed their general education lower division requirements.

4. Grade Point Average

The four year colleges calculate grade point averages for transferable community college coursework completed by transfer students. Tables III-7 and III-8 show the grade point averages of

Table III-7

Community College Grade Point Averages of Transfer Enrollees

1986-87

GPA	SFTC Colleges		Other Colleges	
	UC	CSU	UC	CSU
Less Than 1.9	7%	2%	6%	2%
2.0-2.5	5%	26%	5%	23%
2.6-3.0	26%	38%	26%	36%
3.0-3.5	41%	26%	41%	30%
3.6-4.0	20%	8%	21%	9%

Table III-8

Community College Grade Point Averages of Transfer Enrollees

1987-88

GPA	SFTC Colleges		Other Colleges	
	UC	CSU	UC	CSU
Less Than 1.9	4%	2%	5%	2%
2.0-2.5	6%	28%	5%	24%
2.6-3.0	30%	38%	27%	36%
3.0-3.5	40%	25%	41%	29%
3.6-4.0	21%	7%	22%	9%

transfer enrollees from Pilot Program and other colleges for 1986-87 and 1987-88. In both years, transfer students to UC had higher grade point averages than transfers to CSU, regardless of whether they had been enrolled in a Pilot Program or other community college. Transfers admitted to CSU from Pilot Program colleges in 1986-87 had somewhat lower grade point averages than transfers admitted from other colleges.

5. Enrollment Status

Each year, a significant portion of the community college students admitted as transfers to UC and CSU do not enroll at either of those segments. The percentage of admits who enroll as transfers is defined as the "yield rate", and a higher yield rate increases the transfer rate, which is calculated only for actual enrollees. We examined the yield rates for students admitted to both segments in 1986-87 and 1987-88 from Pilot Program and other colleges. Some of the Transfer Center programs at four-year colleges provided follow-up services to admitted students between the time they were admitted by the college and enrolled there, helping students to obtain financial aid, housing and child care assistance. This service was offered in the hopes of increasing yield rates. The data shown in Tables III-9 and III-10 indicate that in both 1986-87 and 1987-88 the yield rate for UC was higher than the yield rate for CSU for both Pilot Program and other colleges, with the exception of the yield rate for Hispanic students in 1986-87. Yield rate differences were small in that year among other ethnic groups and between men and women, with

Table III-9

Transfers Yield Rates

1986-87

	SFTC Colleges		Other Colleges	
	UC	CSU	UC	CSU
Overall	82%	71%	82%	70%
Gender				
Men	83%	72%	82%	71%
Women	82%	70%	82%	70%
Ethnicity				
Asian	82%	75%	79%	72%
Black	86%	65%	86%	63%
Hispanic	72%	72%	81%	71%
White	83%	70%	82%	71%

Table III-10

Transfers Yield Rates

1987-88

	SFTC Colleges		Other Colleges	
	UC	CSU	UC	CSU
Overall	86%	72%	82%	70%
Gender				
Men	86%	72%	82%	71%
Women	85%	73%	83%	70%
Ethnicity				
Asian	85%	70%	79%	66%
Black	85%	69%	86%	67%
Hispanic	86%	75%	84%	73%
White	83%	73%	83%	71%

Pilot Program college rates generally slightly higher than those for other colleges, at both segments. In 1987-88, the yield rates for transfers from Pilot Program colleges generally increased, though they dropped for black student transfers to UC and for Asian student transfers to CSU. The yield rates for other colleges in 1987-88 were about the same as they had been in 1986-87.

B. COMPARISON OF STUDENTS WHO WERE AND WERE NOT TRANSFER CENTER CLIENTS

The preceding section contrasted trends in transfer for 1986-87 and 1987-88 for students admitted from Pilot Program and other colleges. The students admitted from Pilot Program colleges may have used the Transfer Center or they may have gained admission to the four-year school without using any special help the Center could provide. This section focuses on the SFTC colleges themselves and compares Transfer Center clients to students who did not take advantage of the Centers; we call these students "non-Transfer Center clients." The section presents a more in-depth look at one cohort of transfer students from Pilot Program colleges, comparing those students who used the Transfer Center to those who did not.

We compiled a cohort of transfer students who were enrolled at a participating SFTC two-year college in 1986-87 and were admitted as transfers to UC or CSU in 1987-88. The records of the students at the two- and four-year college were linked using their

Social Security numbers. One pilot college was not included in the cohort because it does not collect Social Security numbers from students.

The results for the cohort cannot be directly equated to the profile of all students who transferred from Pilot Program colleges in 1987-88, because a relatively large share of CSU transfers in 1987-88 enrolled in community college in the fall of 1987 and entered CSU in the spring of 1988. These students are not included in this cohort group. As a result of the single missing community college and the absence of spring admits, some figures presented in this section differ from figures presented earlier.

1. Gender

The gender of transfer students from SFTC colleges in this cohort is shown in Table III-11. Transfer admits from Pilot

Table III-11

Gender of Transfer Admits

1987-88 Cohort Analysis

	Percent Female	
Admits to:	TC Clients	Non-TC Clients
UC	47%	49%
CSU	52%	54%

Program colleges to UC included a slightly higher percentage of males than females: Forty-nine percent of non-Transfer Center client admits and 47 percent of Transfer Center client admits were female. At CSU, transfer admits from Pilot Program colleges included a slightly higher percentage of females than males. However, a relatively lower percentage of Transfer Center clients admitted to CSU were female (52 percent) than were admits who were not Transfer Center clients (54 percent).

These data show a consistent pattern of slightly greater use of Transfer Center services by male than female community college transfer students. The gender of students and their attendance pattern (whether full-time or part-time students) were related. The population of part-time students at community colleges is disproportionately female: 57.5 percent of part-time students and 50.1 percent of full-time students enrolled in the fall of 1987 were female. As discussed below, the population of Transfer Center clients included more full-time than part-time students.

2. Ethnicity

Table III-12 describes the ethnic breakdown for the cohort. For each segment, a proportionately higher percentage of black and Hispanic admits came through the Transfer Center than did not. For UC, over 17 percent of Transfer Center clients admitted were black or Hispanic as opposed to 14 percent of non-Transfer Center client admits. For CSU, 23.5 percent of Transfer Center client admits were black or Hispanic versus 20 percent of non-Transfer Center

Table III-12

Ethnicity of Transfers From SFTC Colleges

1987-88 Cohort Analysis

	Percent of Total Transfers			
	TC Clients		Non-TC Clients	
	UC	CSU	UC	CSU
Asian	16%	13%	17%	18%
Black	4%	6%	4%	6%
Hispanic	13%	18%	10%	14%
White	60%	56%	64%	55%
Others or DK	7%	7%	5%	7%

client admits. CSU's black and Hispanic admits were relatively higher than UC's as a percentage of total admits in both groups -- Transfer Center clients and non-clients.

Table III-13 shows for each ethnic group the percent of admits who were Transfer Center clients. Overall, 46 percent of the transfer admits from Pilot Program colleges to UC were Transfer Center clients and 36 percent of admits from Pilot Program colleges to CSU were Transfer Center clients. This suggests that the Transfer Center program had greater success in reaching UC transfers as opposed to CSU transfers. In most cases, the grants to CSU campuses were about half of the grants to UC campuses ($26,000 versus $50,000), though the community colleges transfer seven times more students to CSU than to UC. In addition, six of

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Table III-13

Percent of Ethnic Group Transfers Served By the Transfer Center

1987-88 Cohort Analysis

	Percent of Ethnic Group Who Transferred and Were TC Clients	
	UC	CSU
Asian	42%	29%
Black	43%	35%
Hispanic	54%	43%
White	45%	37%
Total	46%	36%

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the eleven CSU campuses reported a narrower goal for the program -- to focus on solely on increasing minority transfers.

The table also shows that 42 percent, 43 percent and 45 percent respectively of Asian, black and white UC transfer admits were Transfer Center clients. Over half of UC Hispanic admits from Pilot Program colleges were Transfer Center clients. Of the Asian, black and white admits to CSU from this cohort, 29 percent, 35 percent and 37 percent respectively were Transfer Center clients. A higher percent (43 percent) of Hispanic admits to CSU were Transfer Center clients. For both segments, Hispanic transfers were somewhat more likely than other ethnic groups to be Transfer Center clients, with Asians the least likely.

3. Attendance Pattern

Most transfer admits from Pilot Program colleges in 1987-88 attended community college full-time in 1986-87 (see Table III-14). Transfer Center clients who were admitted in 1987-88 included relatively more full-time students than did non-Transfer Center clients from Pilot Program colleges. This indicates that full-time students were more likely to use Transfer Center services, and this finding held to a greater extent for UC-bound transfers.

Table III-14

Pattern of Attendance at Community College

Transfer Admits

1987-88 Cohort Analysis

	TC Clients		Non-TC Clients	
Attended CC	UC	CSU	UC	CSU
Full time	74%	76%	59%	51%
Part time (6-12 units)	19%	19%	27%	33%
Part time (1-6 units)	7%	5%	14%	16%

4. Remedial Coursework

Under new matriculation policies, community college students are assessed at entry for their math and English skills. Students whose test results show a need for remedial coursework are encouraged to take such courses. Table III-15 shows the percentage of transfer admits from participating colleges who were ever enrolled in remedial math or English in community college. For this cohort, there was little difference between Transfer Center and non-Transfer Center clients admitted to UC. CSU admits included a higher proportion of students who took remedial courses, and higher rates of remedial coursework for Transfer Center clients than for non-clients.

Table III-15

Transfers Who Enrolled in Remedial Courses

1987-88 Cohort Analysis

	Percent of Transfer Admits			
	TC Clients		Non-TC Clients	
	UC	CSU	UC	CSU
Enrolled in CC				
Remedial English	9%	13%	8%	11%
Remedial Math	9%	17%	8%	10%

5. Total Units

While CSU and UC require community college transfers to complete 56 transferable units, most students actually have in excess of 56 community college units at the time of transfer. Table III-16 shows the results for this cohort of transfers enrolled from Pilot Program colleges.

Table III-16

Total Transferable Units

Transfer Enrollees From SFTC Colleges

1987-88 Cohort Analysis

	TC Client		Non-TC Client	
Total Units	UC	CSU	UC	CSU
Less Than 30	3%	4%	3%	8%
31-52	7%	16%	8%	16%
52-70	17%	30%	23%	24%
71-100	47%	32%	43%	30%
Over 101	26%	18%	23%	22%

Most transfers to UC in this cohort -- 73 percent of Transfer Center clients and 66 percent of non-Transfer Center clients -- had more than 71 units. Transfer Center clients admitted to UC had, as a group, more units than non-Transfer Center clients. Half of CSU transfers who were TC clients had more than 71 units; 52 percent of non-Transfer Center clients had more than 71 units. In general, admits to CSU had fewer units than did UC admits, regardless of their participation in the Transfer Center program. Our data did not include information on the extent to which transfer admits had satisfied general education or breadth requirements for the admitting four-year college at the time they transferred.

6. Enrollment Status

Each year, a significant percentage of transfer admits to UC and CSU do not enroll at either segment. They may continue to attend community college and re-apply at a later date, or they may discontinue their education. As discussed in the preceding section, four-year colleges commonly calculate a "yield rate" -- the percent of admittees who actually enroll at their institutions. Table III-17 shows the yield rate for this cohort of students, overall, by gender and by ethnicity.

Table III-17

Transfers From SFTC Colleges

Yield Rates

1987-88 Cohort Analysis

	TC Clients		Non-TC Clients	
	UC	CSU	UC	CSU
Overall	85.6%	77.4%	85.3%	76.9%
Gender				
Men	84.7%	77.0%	86.3%	76.7%
Women	86.6%	78.0%	81.9%	77.0%
Ethnicity				
Asian	84.9%	72.0%	90.0%	73.9%
Black	83.9%	71.0%	83.8%	75.2%
Hispanic	81.4%	81.9%	79.8%	76.0%
White	86.2%	78.7%	85.2%	74.0%

For this cohort of students, the overall yield rates for each segment -- while very similar for both Transfer Center clients and non-clients -- were slightly higher for Transfer Center clients than for non-clients. For UC admits from Pilot Program colleges, the yield rate for women was substantially higher for Transfer Center clients than for non-clients. For men, the Transfer Center clients' yield rate at UC was lower than for non-Transfer Center clients. Both male and female admits to CSU who used the Transfer Center enrolled in slightly higher proportions than those who did not use the Center.

Yield rates by ethnicity vary according to whether students were or were not Transfer Center clients. For Asian students admitted to both segments, non-Transfer Center clients had somewhat higher yield rates. For black, Hispanic and white students UC yield rates were slightly higher for Transfer Center clients than for non-clients. For CSU admits, white and Hispanic yield rates were slightly higher for Transfer Center clients than for non-clients. Yield rates among Asian and black students were slightly higher for CSU transfers who did not use the Transfer Center.

IV. THE EFFECTIVENESS OF THE PILOT PROGRAM

Chapter II examined how successfully colleges implemented the Transfer Centers. Based on field visits, we concluded that the Centers were successfully implemented. This chapter asks the next, and to a considerable extent, the most important, question: How effective were the Transfer Centers in improving transfer rates, particularly for underrepresented students?

To answer this question, we used an analytic procedure in which we measured the average transfer rate for the twenty state-funded Transfer Centers (SFTCs) before and after the introduction of the Pilot Program. All other things being equal, the program could be judged effective if the transfer rate increased.

Though simple in theory, this design is difficult to carry out in practice for several reasons. First, all other things are not equal. That is, there are many causes of transfers going up or down that may have little to do with the Transfer Centers per se. For example, student enrollment, demographics, and the proportion of students who are enrolled full-time can, and do, change for each college over time, and these (as well as other) factors affect transfers. Thus, the analysis presented in this chapter takes such factors into account so that the "post" Pilot Program period can be reasonably compared to the "pre" Pilot Program situation.[20]

Second, in addition to changes that occur within each of the SFTC colleges, there may be broad trends affecting all the community colleges and their transfer rates. For this evaluation's purposes, we need not investigate the causes of these broad shifts or fluctuations in transfer rates, but rather make sure that they do not distort the goal of assessing the Pilot Program's effectiveness. To this end, we not only want to compare the SFTC pre and post; we must also compare the increase (or decline) in the SFTC's transfer rates with the general increase (or decline) in transfer rates for all the other colleges. This chapter presents these comparisons.

Third, the traditional measurement of transfer rate can itself distort the reality of transfer activity at a college. The reason for this is simple. Currently, the standard measure of transfer activity is the ratio of the number of transfers to the total credit enrollment. But the enrollment figure includes a majority of students who cannot transfer in the year the measurement is made because they have not completed sufficient course work to do so. Therefore, the total credit enrollment far exceeds the possible number of transfers, and the transfer rate is consequently always very low. Other measures of transfer effectiveness should, and can, be developed. For the sake of this report, we have elected to calculate the transfer rate in the traditional way (with some adjustments to correct for obvious flaws in the usual measure).[21] We have focused the evaluation on increases (or decreases) in the rate of transfer, not on absolute levels. In addition, the evaluation includes comparisons of transfer rates for the Pilot Program colleges and for all other colleges.[22]

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[20] Though the Pilot Program began in 1985-86, Chapter II found that the first year or so of implementation was, not surprisingly, difficult. By the third year, all SFTC colleges had successfully implemented the state model. Therefore we have chosen 1987-88 as the "post" year for assessing the program's effectiveness. We will evaluate its effectiveness against the pre-implementation years 1982-83 through 1984-85.

The following sections analyze effectiveness for transfers to the University of California (UC) separately from transfers to California State University (CSU) rather than combining the two. By doing so, the absolute levels of transfer rates displayed in this chapter are less than if the two were combined. This procedure does not affect the validity of our analysis or

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[21] The calculation of transfer rate for the pre and post period was basically the number of transfers divided by the number of credit enrollees times 1,000, which yields the transfer rate per 1,000 credit enrollees. For the post-implementation transfer rate, we divided the number of transfers in 1987-88 by the average number of credit enrollees in fall 1987. For the pre-implementation transfer rate, we divided the total number of transfers for 1982-83, 1983-84, and 1984-85 by the total fall credit enrollment over the same time period; using these averages helps to take into account minor annual fluctuations in transfers. Appendix C shows the actual number of transfers to UC and CSU for 1982-83 through 1987-88.

[22] From the standpoint of statistical analysis, the data presented below will not support cause and effect conclusions regarding the Transfer Center Pilot Program. However, the data do provide information on the impact of the Transfer Centers, and, together with other evidence gathered by the evaluation, provide strong circumstantial evidence in support of evaluation findings on Pilot Program effectiveness.

conclusions, but the reader should understand that the transfer rates are smaller than they would be if the rates for both segments were combined. Similarly, due to limitations in the data,[23] we could not measure transfer rates to four-year institutions other than UC and CSU. Since as much as one-fifth of transfers go elsewhere,[24] the transfer rates shown in this chapter understate the true state of affairs. Once again, we have no reason to believe that this omission invalidates the evaluation's findings.

A. TRANSFERS TO UC

1. Raw Transfer Rates

The data available for transfers to UC are limited, in that winter and spring transfers were not recorded by UC for the years prior to 1986-87. Consequently, we cannot make a pre-to-post Pilot Program comparison for fall plus winter/spring transfers to UC.

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[23] As the first chapter indicated, the data for the analysis described above came from several sources. The number of transfers to UC and CSU came from data published by CPEC; community college enrollment data came from reports published by the California Community Colleges. For 1986-87 and 1987-88 (the Pilot Program years for which we had data), the published data were checked against computer-readable files provided independently by all three segments. Neither published nor computer-readable data were available from private colleges and universities for both the pre and post Pilot Program periods.

[24] In fall 1987, 21 percent of all transfers to four-year institutions in California were to private colleges and universities. (California Postsecondary Education Commission, Update of Community College Transfer Student Statistics, Fall 1987. Sacramento: March 1988, Report 88-15)

Table IV-1 shows the average UC fall raw transfer rate[25] of the SFTC colleges before and after Pilot Program implementation, and the corresponding average rates for all other colleges in California.[26] Table IV-1 suggests that SFTC colleges increased their average transfer rate after the implementation of the Pilot Program. The 1982 - 1984 average fall transfer rate to UC for these colleges was 4.8 transfers per thousand, whereas the rate for fall 1987 was 5.9 -- an increase of 1.1 transfers per thousand credit enrollees, or about a 20 percent increase.

Though 1.1 transfers per thousand is our best estimate of the increase in the fall raw transfer rate to UC for the Pilot Program colleges, there is statistical uncertainty associated with this and all other estimates made in this chapter.[27] For example, the 20 percent increase shown in this case should not be considered as definitive, due to the statistical uncertainty associated with this estimate. Nonetheless, the results presented in Appendix D lead us to be confident that a notable increase did occur. We shall return to this issue subsequently.

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[25] As noted in the text, the transfer rate of any college may vary due to varying circumstances, such as a change in its percentage of full-time enrollment. When transfer rates have been recomputed to account for such varying circumstances, they are called adjusted transfer rates. In order to distinguish these adjusted transfer rates from the (original) unadjusted rates, the unadjusted rates are called raw transfer rates. Average transfer rates were calculated as the average of the transfer rates of the individual colleges.

[26] Though data are not available for winter/spring transfers to UC prior to 1986, data are available for the winter/spring of 1987-88. Using these data, we calculate that the UC winter/spring transfer rate for SFTC colleges was 2.7 transfers per thousand credit enrollees. Due to data limitations, we are unable to determine if this represents an increase in the transfer rate since the onset of the Pilot Program. The 1987-88 full year UC transfer rate for the SFTC colleges was 8.9.

[27] Appendix D (Volume 3 of this report) presents details on how large the uncertainty is for each estimated rate, though the main text indicates our assessment of the reliability of all key estimates.

Table IV-1

Average Raw Transfer Rates to UC (Fall)

Transfers Per 1,000 Credit Enrollees*

	Pre-Implementation Period	Post-Implementation Period	Significance Probability**
SFTC Colleges	4.8 (1.1)	5.9 (1.4)	.02
Other Colleges	4.2 (0.3)	4.0 (0.3)	.07

* The numbers in parenthesis are the standard deviations of the estimated transfer rates. These statistics indicate the extent of statistical uncertainty of the estimates. Numbers in parentheses in all other tables also refer to the standard deviations of the estimated transfer rates.

** This column is the significance probability (i.e., "p-value") of no difference between pre- and post-implementation transfer rates. The probability is computed using a two-tailed Wilcoxon Signed Rank Test, which accounts for differences in transfer rates on a college by college basis. Another measure of the difference in transfer rates is a Paired t-Test. Details are presented in Appendix D, Section 7.

The second row in Table IV-1 shows the fall raw transfer rates to UC for colleges other than those in the Pilot Program. There are two features to notice about these transfer rates. First, the average post-implementation period transfer rate (4.0) is lower than the average pre-implementation period rate (4.2). This decrease implies that the raw transfer rate for these colleges, unlike the SFTC colleges, most likely did not increase.

Second, the pre transfer rate of the other colleges is lower than that of the SFTC colleges. Why is this the case? The Pilot Program colleges received their grants through a competitive process; they were not selected randomly, as pure experimental design would require. Therefore, the colleges in the Pilot Program differ from other colleges in a number of respects. Tables IV-2a and 2b show two important ways in which they differ: Prior to the start of the Pilot Program, the SFTC colleges enrolled a higher percentage of full-time and a lower percentage of white students than did the other colleges.[28]

These differences are important because they affect transfer rates. We conducted a regression analysis that generally showed transfer rates increase as the percentages of full-time or of white students increase.[29] In other words, comparisons between the transfer rates of SFTC and other colleges as shown in Table IV-1 are somewhat inappropriate because the comparison colleges are different. Therefore, our comparison techniques took these differences into account and produced a "level playing field" on which the effectiveness of the Pilot Program was judged.

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[28] Available sources provide data on the percent of credit students who attend full-time, and the percent of all (credit and non-credit) students who are white (or members of other ethnic groups). Given the absence of more specific data, we assumed in our analysis that the percent of white credit students is the same as the percent of all white students.

[29] Appendix D presents the results of all the regressions discussed in this chapter.

Table IV-2a

Average Percent Full-Time Credit Students

	Pre-Implementation Period	Post-Implementation Period
SFTC Colleges	29.6%	27.6%
Other Colleges	25.8%	24.5%

Table IV-2b

Average Percent White Students*

	Pre-Implementation Period	Post Implementation Period
SFTC Colleges	51.9%	52.1%
Other Colleges	68.0%	68.1%

*Includes non-credit students

To validate our procedures, we used two methods to approximate a level playing field. The first method was to match to the SFTC colleges a subset of the other colleges. This matched subset was similar to the SFTC colleges in enrollment and several other characteristics. Using this approach, the pre and post raw transfer rates for the matched colleges were 4.8 and 4.6, respectively, a noticeable difference from the rates of 4.2 and 4.0 for all (matched and unmatched) other colleges. Because matching always implies some arbitrariness in deciding which colleges to exclude, the analysis reported in the next subsection is based on a different (but complementary) method of adjusting the transfer rates statistically.[30]

2. Adjusted Transfer Rates

Table IV-3 presents the UC fall transfer rates after adjusting for changes in the percentage of full-time and percentage of white students between the pre- and post-implementation periods. SFTC and other colleges were adjusted separately.[31]

For the SFTC colleges after the implementation of the Pilot Program, we estimate that the adjusted transfer rate would have been 6.3 as compared to 5.9 for the raw transfer rate shown in Table IV-1. Why this increase? Table IV-2a showed that the percentage of full-time students went down at the SFTC colleges during the period of the Pilot Program, but we know that full-time students are more likely to transfer (see Appendix D for the exact analysis). Consequently, the post-implementation transfer rate should be adjusted upward for SFTC colleges to take into account their lower percentage of full-time students. Similar calculations also apply to the other colleges whose raw transfer rates were adjusted upward.[32]

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[30] Both methods yielded similar results (see Appendix D).

[31] More specifically, in order to adjust the post-implementation transfer rates, we performed a multiple regression of raw transfer rates on percent full-time and percent white students. To estimate the adjusted average post-implementation transfer rate, we substituted the average values of percent full-time and percent white for the pre-implementation period into the regression equation for the post-implementation period. Appendix D shows these equations; the values of percent full-time and percent white are shown in Tables IV-2a and b.

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[32] We made a second type of adjustment to check the validity of the results. Under this adjustment, the base case was taken to be the group of other colleges prior to the beginning of the Pilot Program; their average raw transfer rate was 4.2 transfers per thousand credit enrollees. For the pre and post SFTC colleges (as well as for the post other colleges), we estimated their transfer rates under the assumption that they had the same average percentages of full-time and of white students as the base case (the pre-implementation other colleges). For the SFTC colleges prior to the implementation of the Pilot Program, we estimated that the transfer rate was 5.9 as compared to 4.8 for the raw transfer rate shown in Table IV-1. Why this increase? Table IV-2b showed that the other colleges had a considerably higher average percentage of white students. Since the transfer rate increases as the percentage of white students increases, when we adjusted the SFTC colleges to have the same average percent white students as the other colleges, the transfer rate at SFTC colleges increased for the period prior to the Pilot Program. In other words, it is reasonable to assume that the colleges that opted into the Pilot Program had a higher average transfer rate even taking into account the fact that they had a lower percentage of white students. After making similar adjustments for the post-implementation period, we estimated that the SFTC colleges would have had a UC fall transfer rate of 7.0, which represents 1.2 additional transfers per 1,000 credit enrollees compared to the pre-implementation transfer rate for these colleges. In contrast, the other colleges showed no increase over this period. This analysis fully agrees with the analysis presented above.

Assessing the evidence at hand, we conclude that the Pilot Program colleges did show a significant increase in UC fall transfer rates,[33] even after taking into account broad trends affecting all community colleges, and specific differences among colleges that affect transfer rates.[34]

Table IV-3

Adjusted Average Transfer Rates to UC (Fall)

Transfers Per 1,000 Credit Enrollees

	Pre-Implementation Period	Post-Implementation Period	Significance Probability
SFTC Colleges	4.8 (1.1)	6.3 (0.5)	.04
Other Colleges	4.2 (0.3)	4.2 (0.1)	.30

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[33] The probability is less than .002 that this increase occurred by chance (see Appendix D, Section 7).

[34] The regression analysis showed that a high percentage of the variation in transfer rates across colleges can be explained by differences among the colleges in the percentages of full-time and of white students. Of course, other specific factors also affect transfer rates, but these may be the most significant of the college-specific factors. In addition, such broad concerns as changes in the economic situation or in the admissions policies of four-year institutions undoubtedly affect transfer rate. We have taken these broad trends into account by examining the difference between the pre and post situations for both the SFTC and other colleges. In this respect, the lack of an increase in either the raw or adjusted UC fall transfer rates for the other colleges (see Tables IV-1 and IV-3) suggests that the increase observed in the transfer rate for the SFTC colleges did not occur because of the cumulative effect of such broad trends.

3. Assessing the Results

Knowing that the Pilot Program did yield statistically significant gains for UC transfers, it is appropriate to assess how meaningful this increase was in practical terms. We will do this by asking and answering a series of questions that place the statistical findings into practical perspective:

a. **What was the percent increase in transfer rate for SFTC colleges from pre- to post-implementation?**

After taking into account changes in student ethnic distribution and the percentage of full-time students enrolled, the SFTC colleges had an average increase of approximately 30 percent in their fall UC transfer rate. The other colleges showed no increase on average.

b. **How many additional transfers to UC might be credited to the Pilot Program?**

We estimate that the number of fall UC transfers from SFTC colleges was 392 more than it would have been without the Transfer Center Pilot Program.[35] This calculation takes into account changes in the percentages of full-time and white students at the SFTC colleges, but it is only approximate and could be somewhat larger or smaller (see Appendix D for details). Though this number should not be considered definitive, it indicates the order of magnitude of the program's effect.

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[35] This estimate (392) is calculated by taking the difference (1.5) between the pre- (4.8) and post-implementation (6.3) average adjusted transfer rates and multiplying by the total credit enrollees at the SFTC colleges in the post-period (261,545) and dividing by 1,000.

c. **If the Pilot Program had been implemented statewide, how many additional transfers to UC might have occurred?**

The answer to this question must be considered speculative, though we can provide an estimate based on statistical analysis. There truly is no way to predict exactly how the colleges that did not receive state funding would have implemented the program. However, if they had implemented Transfer Centers as successfully as did the SFTC colleges and if all other things had been equal, we estimate there would have been about 1,200 additional fall UC transfers statewide (assuming, of course, that UC could have accommodated this approximately 25 percent increase in transfers from community colleges).[36] Though this number should be seen as speculative, it does provide a sense of the potential impact of the Transfer Center approach.

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[36] To answer the question posed above, we estimated what the pre-implementation transfer rates would have been if the SFTC and other colleges had had respectively the same average percent full-time and percent white students as in the post-implementation period. To do this, we regressed transfer rate on percent full-time and percent white for the pre-implementation period and substituted the post-implementation values of the average percent full-time and percent white into the resultant equation. (See Appendix D for the regressions.) This procedure yielded adjusted pre-implementation transfer rates of 4.7 and 4.1 for the SFTC and other colleges respectively. For SFTC colleges, we computed the percent increase in transfer rate (25%) by taking the ratio of 5.9 (which is the raw transfer rate for the post-implementation period as shown in Table IV-1) to 4.7. To estimate the incremental number of transfers from SFTC colleges, we subtracted 4.7 from 5.9, and multiplied this by the SFTC colleges' post-credit enrollees divided by 1,000; this calculation yielded an increment of about 300 transfers from the SFTC colleges. For the other colleges, we multiplied the adjusted pre-implementation transfer rate (4.1) by

4. Ethnic Group Comparisons

A main goal of the Pilot Program was to increase the transfer rates of underrepresented minority students. This section examines the effectiveness of the SFTC colleges in achieving this goal for UC fall transfers.

Table IV-4 shows the average raw transfer rates for different ethnic groups prior to and after the implementation of the Pilot Program at both SFTC and other colleges.[36] The patterns revealed in these numbers can be misleading for two reasons. First, since the number of students within each ethnic group is smaller than the overall total, the statistical uncertainty in the estimated transfer rate for each ethnic group is greater than the uncertainty for the overall estimated transfer rate. Second, as discussed earlier, these raw rates do not take into account changes in percentages of full-time and of white students across the colleges. Both of these problems are mitigated by computing the adjusted transfer rate as discussed earlier. These results are shown in Table IV-5. This table suggests that for both the pre and post

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enrollees (825,725) at the other colleges and divided by 1,000, which yielded an estimate of about 900. The figure quoted in the text above is the sum of 900 plus the incremental contribution of 300 transfers from the SFTC colleges.

[36] Though data existed for other ethnic groups, the numbers were too small to draw any justifiable conclusions. Consequently, the results for these students are not shown.

adjusted transfer rate as discussed earlier. These results are shown in Table IV-5. This table suggests that for both the pre and post situation at the SFTC colleges, the estimated Asian fall transfer rates were highest, followed by those for white, Hispanic, and black students, respectively. The statistical error associated with these estimates is reasonably small, but the reader must be cautioned that the uncertainty is large enough to consider these

Table IV-4

Average Raw Transfer Rates to UC (Fall) By Ethnic Group

Transfers Per 1,000 Enrollees

	Pre-Implementation Period	Post-Implementation Period	Significance Probability
SFTC Colleges			
Asian	8.6 (1.7)	10.6 (2.0)	.08
Black	2.3 (0.7)	2.3 (0.6)	.87
Hispanic	4.1 (0.9)	4.6 (1.2)	.53
White	5.2 (1.2)	5.4 (1.5)	.94
Other Colleges			
Asian	7.4 (0.8)	6.7 (0.9)	.27
Black	2.7 (0.4)	2.9 (0.8)	.07
Hispanic	3.6 (0.3)	4.2 (0.8)	.85
White	4.5 (0.4)	3.9 (0.3)	<.01

findings as suggestive but not conclusive. The data indicate that the Pilot Program had its greatest effect at UC on Asians followed by Hispanics. For white students, there may have been a slight gain, whereas the data do not reveal any improvement in the black transfer rate.

Table IV-5

Adjusted Average Transfer Rates to UC (Fall) By Ethnic Group

Transfers Per 1,000 Enrollees

	Pre-Implementation Period	Post-Implementation Period	Significance Probability
SFTC Colleges			
Asian	8.6 (1.7)	12.1 (1.2)	.02
Black	2.3 (0.7)	2.3 (0.2)	.17
Hispanic	4.1 (0.9)	5.0 (0.4)	.19
White	5.2 (1.2)	5.8 (0.6)	.21
Other Colleges			
Asian	7.4 (0.8)	6.9 (0.2)	.71
Black	2.7 (0.4)	2.9 (0.1)	.17
Hispanic	3.6 (0.3)	4.2 (0.2)	.06
White	4.5 (0.4)	4.0 (0.1)	.75

These results have to be weighed against broader trends that may have been occurring at the other colleges. As seen in Table

IV-5, the Asian and white fall transfer rates for other colleges declined for the post-implementation period. This finding strengthens our belief that the SFTC colleges did show improvement for these ethnic groups. For black students, the data suggest that the fall transfer rates showed little change for either SFTC or other colleges. For Hispanics, the SFTC colleges had an estimated 22 percent increase, but the other colleges had an estimated 17 percent increase over the same time period. Though these data are not conclusive, they do allow the reasonable speculation that (a) a broad trend existed for this time period in which transfer rates of Hispanics to UC increased for community colleges in general and (b) the SFTC colleges may have added more Hispanic transfers beyond the general trend.

B. TRANSFERS TO CSU

1. Raw Transfer Rates

The analysis of transfers to CSU will follow the method used above for UC. However, in this case, data were available for summer, fall, winter and spring transfers, and thus transfer rates will be estimated for CSU over the full school year.[38] Table IV-6 shows the raw transfer rates before and after the Pilot Program's implementation for both SFTC and other colleges. It indicates that the transfer rate increased slightly for the SFTC colleges, and shows virtually no change for other colleges. However, as discussed above, it is necessary to adjust these rates for differences between the SFTC and other colleges in the percentages of full-time and of white students.

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[38] Examination of transfer statistics over the period from 1982 reveals a fairly constant pattern in which approximately two-thirds of the yearly transfers to CSU occur in the fall semester. (California Postsecondary Education Commission, Update of Community College Transfer Student Statistics, 1988-89. Sacramento: August 1989, Report 89-23)

2. Adjusted Transfer Rates

Table IV-7 presents the adjusted transfer rates. These data show that the estimated transfer rates increased slightly for SFTC as well as other colleges, with the SFTC colleges showing an eight percent increase and the other colleges showing a three percent increase. The difference in these transfer rates is not great, and becomes less important when statistical uncertainty is considered. But the positive showing of SFTC colleges forms part of a broader picture of successful implementation of the Transfer Centers in the Pilot Program, as described in Chapter II.[39]

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[39] The adjustment presented in the text takes into account pre and post differences in percent full-time and percent white students, but does not take into account differences between SFTC and other colleges. In footnote 32, we discuss adjusting SFTC transfer rates to make them statistically similar to the transfer rates of non-SFTC colleges. Using that procedure for CSU transfers, we estimate the pre and post CSU transfer rates for SFTC colleges would be 42.1 and 44.9 respectively, or an increase of about seven percent. Making similar adjustments for the other colleges leads to an estimated three percent decline, which is virtually no change in light of statistical uncertainties.

Table IV-6

Average Raw Transfer Rates to CSU (Full Year)

Transfers Per 1,000 Credit Enrollees

	Pre-Implementation Period	Post-Implementation Period	Significance Probability
SFTC Colleges	42.0 (2.5)	44.0 (2.8)	.05
Other Colleges	38.8 (2.0)	37.8 (1.8)	.75

Table IV-7

Adjusted Average Transfer Rates to CSU (Full Year)

Transfers Per 1,000 Credit Enrollees

	Pre-Implementation Period	Post-Implementation Period	Significance Probability
SFTC Colleges	42.0 (2.5)	45.2 (1.2)	.22
Other Colleges	38.8 (2.0)	40.0 (1.6)	.14

3. Assessing the Results

The statistical evidence shows a small effect of the Pilot Program on transfers to CSU. We must be cautious in extrapolating from such small differences. However, the balance of fieldwork and quantitative analysis point to the conclusion that the Pilot Program had a positive effect on transfers. More specifically, our best estimate is that the SFTC colleges transferred about 507 more students than they would have without the program.[40] If all other colleges had implemented Transfer Centers as successfully as did the SFTC colleges and if all other things had been equal, we estimate there would have been about 3,316 more CSU transfers statewide -- an increase of about seven percent in CSU transfers.[41]

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[40] This estimate was calculated by taking the ratio of the post- to the pre-implementation transfer rates for the other colleges and multiplying by the pre-implementation transfer rate for the SFTC colleges; the resulting estimate is the transfer rate for SFTC colleges if they had shown the same rate of change as the other colleges. The difference between this number and the adjusted SFTC post-implementation transfer rate was multiplied by the total credit enrollees in the post-period (261,545) and divided by 1,000.

[41] A procedure similar to that described in footnote 36 was used to estimate the potential statewide increase in transfers for CSU. We substituted the average percent full-time and percent white students for the post-implementation period into the pre-implementation regressions of transfer rate on percent full-time and percent white; this procedure yielded adjusted pre-implementation transfer rates of 41.0 and 36.9 for SFTC and other colleges respectively. To estimate the additional transfers that SFTC colleges might have produced compared to what they might have produced in the absence of the Pilot Program, we multiplied the adjusted pre-implementation SFTC colleges' transfer rate (41.0) by the ratio of the post-implementation transfer rate (37.8) to the adjusted pre-implementation transfer rate (36.9) of the other colleges; subtracted from this the SFTC colleges' post-implementation transfer rate (44.0); multiplied by the SFTC colleges' credit enrollees in 1987 (261,545); and divided by 1,000. To estimate the additional transfers from other colleges, we

Though this is the best statistical estimate possible with these data, we must caution the reader that the data are also compatible with an estimate that is several percentage points higher or lower (including no additional transfers).

4. Ethnic Group Comparisons

The ethnic composition of transfers to CSU was not available for full year transfers. Therefore, this section examines only fall transfer data.[42]

Tables IV-8 and IV-9 respectively show the raw and adjusted fall transfer rates for different ethnic groups comparing SFTC and other colleges for the pre- and post-implementation periods of the Pilot Program.[43] These data reveal no significant differences in fall transfer rates to CSU between SFTC and other colleges for different ethnic groups. The percent decrease is about the same for the two groups of colleges, except for Asian transfers where

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multiplied the other colleges' adjusted pre-implementation transfer rate (36.9) by the ratio of the SFTC colleges post (41.0) to pre-implementation transfer rate (44.0); subtracted this from the other colleges post-implementation transfer rate (37.8); multiplied by the other colleges' credit enrollees in 1987; and divided by 1,000. The total estimate is 3,316, which is the sum of estimates of the number of transfers to CSU (2,785) that might have come from the other colleges plus those (531) that might have been contributed by the SFTC colleges.

[42] Total (full year) transfers to CSU in 1987-88 were 44,700, of which 28,252 occurred in the fall. The preceding section showed transfer rates to CSU for the full year; this section analyzes transfer rates for fall only (since ethnic data are not available for the full year), and the rates are proportionately lower.

[43] Though data existed for other ethnic groups, the numbers were too small to draw any justifiable conclusions. Consequently, the results for these students are not shown.

the relative decline may have been greater for SFTC colleges. However, the data are too statistically uncertain to support a strong conclusion.

Table IV-8

Average Raw Transfer Rates to CSU (Fall) By Ethnic Group

Transfers Per 1,000 Enrollees

	Pre-Implementation Period	Post-Implementation Period	Significance Probability
SFTC Colleges			
Asian	36.2 (3.9)	27.6 (2.8)	.04
Black	20.1 (1.4)	20.7 (1.9)	.65
Hispanic	24.0 (2.2)	22.4 (2.4)	.53
White	30.6 (1.8)	27.4 (1.9)	.01
Other Colleges			
Asian	31.7 (2.0)	29.1 (3.2)	<.01
Black	23.6 (1.7)	21.3 (2.4)	.07
Hispanic	22.6 (1.5)	20.3 (1.3)	.23
White	27.6 (1.4)	24.0 (1.2)	<.01

Table IV-9

Adjusted Average Transfer Rates to CSU (Fall) By Ethnic Group

Transfers Per 1,000 Enrollees

	Pre-Implementation Period	Post-Implementation Period	Significance Probability
SFTC Colleges			
Asian	36.2 (3.9)	28.7 (1.3)	.07
Black	20.1 (1.4)	19.7 (0.8)	.68
Hispanic	24.0 (2.2)	23.4 (1.2)	.79
White	30.6 (1.8)	28.5 (0.7)	.33
Other Colleges			
Asian	31.7 (2.0)	30.8 (1.1)	.80
Black	23.6 (1.7)	22.0 (0.7)	.95
Hispanic	22.6 (1.5)	21.7 (1.1)	.48
White	27.6 (1.4)	25.5 (1.0)	.06

V. SUMMARY AND CONCLUSIONS

A. BACKGROUND

The twenty community colleges selected to participate in the Transfer Center Pilot Program were widely distributed geographically (in northern, central, and southern California) and in various types of communities (urban, rural and suburban). On the average, the Transfer Center colleges were more likely to be of medium size and enroll a higher percentage of black and Hispanic students than community colleges statewide. Their share of total transfers to UC and CSU the year before the Pilot Program began was proportional to their share of total community college enrollment, with a slightly higher share of UC transfers. Prior to the start of the Pilot Program, however, their average transfer rate was higher than that of colleges that did not receive state program funding.

This independent evaluation of the Transfer Center Pilot Program was designed to answer two questions:

(1) Was the program implemented successfully by participating community colleges and public-four year colleges and universities?

(2) Was the program effective in increasing transfer rates, particularly among underrepresented students?

B. PROGRAM IMPLEMENTATION

Participating two- and four-year colleges were responsible for implementing an April 1985 intersegmental plan for the Transfer Center Pilot Program. This plan established a framework for program implementation, and defined the roles and responsibilities of each segment. The evaluation examined the extent to which the plan was successfully implemented and the planned transfer services flowed to their intended clients, particularly underrepresented students. The success of the program depended on how well the plan was implemented by each segment.

1. Implementation at the Community Colleges

Transfer Center Clients. In 1986-87 -- midway through the Pilot Program -- the Transfer Centers reported that eight percent of students enrolled in participating community colleges were Transfer Center clients. There were relatively more minority students, full-time students and students enrolled in remedial mathematics or English among Transfer Center clients than among community college students as a whole. Our exploratory telephone survey of recent transfers from three participating colleges indicated that 80 percent of the respondents had heard of the Transfer Center and 78 percent of those who had heard of the Center had used it. More Hispanic, white and Asian transfers than black transfers reported having heard about the Transfer Center, though black students who had heard of the Center were somewhat more likely to have used its services.

Problems and Successes. Early in the program's implementation, there were problems: the need to integrate the Centers with existing community college student services, (counseling, EOPS and Disabled Student Services); multiple duties assumed by Transfer Center directors (which diluted their Transfer Center effort on some campuses); and a lack of training and administrative experience among some directors. However, the Transfer Centers enjoyed wide administrative support, particularly from top campus administrators, and this support was vital to the resolution of these problems. By the program's third year, most implementation issues had been resolved.

The introduction of a Transfer Center was most smoothly accomplished at colleges which had a strong tradition of transferring students to four-year institutions. These colleges had receptive campus environments, where it was relatively easy to attract faculty and some segments of the student body to Transfer Center events. However, the majority of Transfer Centers experienced difficulty in obtaining active faculty involvement in the program.

Significant progress in articulation was achieved during the Pilot Program among participating colleges. By the end of the program, complete breadth and general education agreements existed among all the Transfer Center community colleges and the UC and CSU campuses they had applied with for program grants. Key transfer majors were completely articulated in all but one case. The Transfer Center program contributed to this progress in articulation by serving as a focal point for raising and resolving disputes in articulation and fostering intersegmental cooperation.

Transfer Center Services. Within each campus setting Transfer Center staff identified a pool of potential transfer students, developed a set of Transfer Center clients and provided services to those clients. These services included tracking the academic progress of potential transfer students, trying to motivate students to transfer, and assisting students in the transfer process.

Three models of Transfer Center service delivery were observed in evaluation fieldwork: a Group Approach, an Individual Approach and a Mixed Approach. Group Approach Transfer Centers served students as a group and did not keep track of their academic progress or individual use of Center services. The twelve colleges that used this approach conducted special outreach efforts to minority underrepresented students to encourage them to consider transfer and to use the Center services. The Group model was found primarily on larger community college campuses.

Individual Approach Transfer Centers, found at four colleges, served clients using a caseload approach, by carefully monitoring individual student academic progress and utilization of Center services. The Individual Model was used primarily by small colleges (fewer than 5,000 students) with high percentages of minority enrollments (40 percent or more).

The Mixed Approach served Asian and white students using the Group Approach and served black and Hispanic students using the Individual Approach. The Mixed model was found at four campuses with over 10,000 students and between 15 to 20 percent minority enrollment.

Both the Individual and Mixed models of Transfer Center service delivery provided individualized assistance to minority underrepresented students. This appeared to be more successful than the Group model for reaching these students and providing them with services.

Summary. The Transfer Center program evolved on most of the community college campuses over the course of the Pilot Program. Though there were problems in the early stages of the program, progress was made in clarifying the roles and responsibilities of Transfer Center directors and integrating the Centers with other student services, and all Centers became fully operational and met state plan goals within the Pilot Program period. Successfully implemented Centers received top level administrative support, were led by personnel with appropriate experience and training, functioned effectively with their four-year counterparts, and were operated by staff who worked hard at outreach to underrepresented students.

2. Implementation at Four-Year Institutions

Goals. The goal shared by most community college administrators -- increasing all transfers with an emphasis on minority underrepresented students -- was also the goal of four-year college administrators at ten of the eighteen four-year colleges visited during evaluation fieldwork. Staff at eight four-year colleges expressed a narrower goal of increasing solely black and Hispanic transfers. These staff had a greater sense of urgency toward outreach to minority students than that expressed by their community college counterparts, which led to greater collaborative efforts to locate and motivate minority student transfer candidates.

Activities and Services. Four-year college Transfer Center programs engaged in a wide range of activities and services: application workshops for community college students conducted at community college Transfer Centers; individual academic advisement for community college students; applicant follow-up for students applying to four-year campuses; training for community college staff on current four-year college admissions policies; and articulation agreements and faculty activities in which four-year college faculty met with community college faculty in related disciplines. All the participating four-year colleges visited during the evaluation implemented the workshops and academic advising components of the program, but other program elements were implemented less consistently.

Campus Support for Transfer Center Services. In order to provide the services discussed above, four-year Transfer Center staff needed logistical support from their institutions. They needed articulation major sheets, which explain four-year entrance requirements and prerequisites for majors; admissions data on the status of community college transfer applicants; access to admissions evaluators to assess transfer applicant transcripts; and access to four-year faculty to arrange articulation and other meetings with community college instructors. In all but a few cases, complete logistical support from the four-year institution was present by the end of the Pilot Program.

3. Intersegmental Cooperation

Intersegmental cooperation among community college and four-year college staff was an essential feature of the state plan for the Transfer Center Pilot Program. The level of cooperation found by the evaluation met and exceeded state expectations, and extended beyond the activities of the Transfer Center program itself. Collaborative outreach to minority students, regional cooperative efforts, and improved relationships between two- and four-year administrators helped to resolve problems related to admissions policies and procedures, articulation, and other matters of importance to the transfer function. Regional clusters of participating institutions emerged, extending beyond the boundaries of the original sets of colleges that applied for program support.

There were isolated cases of intersegmental problems in the Pilot Program which were not resolved by the mechanism set forth in the state plan. The CSU and UC campuses did not utilize their system level offices to resolve such problems with community colleges. Instead, four-year campus representatives sought help directly from the community college Chancellor's Office, which had no authority to deal directly with individual four-year colleges.

C. PROGRAM EFFECTIVENESS

In order to assess program effectiveness, the evaluation compared the transfer rates of state funded Transfer Center (SFTC) and other community colleges before and after the implementation of the Pilot Program. The "pre-program" transfer rate was defined as the number of transfers in 1982, 1983 and 1984 divided by the community college fall credit enrollment in those years. The "post-program" transfer rate was defined as the number of transfers in 1987 (when the Pilot Program was most fully implemented) divided by the community college fall credit enrollment in 1987.

1. Transfers to UC

SFTC colleges showed growth in their average fall transfer rate to UC, while other colleges showed a slight decline. However, the SFTC colleges had a higher percentage of full-time credit students and a lower percentage of white students than did other colleges. Analysis showed that these differences affect transfer rates. Therefore, the raw average transfer rates for SFTC and other colleges were adjusted statistically, with the result that the SFTC colleges' UC adjusted transfer rates increased following program implementation, while the UC transfer rates for other colleges remained constant. We conclude that the Pilot Program colleges showed a significant increase in UC fall transfer rates, even after taking into account broad trends affecting all community colleges and specific differences among colleges that affect transfer rates.

Specifically:

- State funded Transfer Center (SFTC) colleges are estimated to have increased their fall UC transfer rate by approximately 30 percent, while other colleges showed no average increase.
- The number of fall UC transfers from SFTC colleges is estimated to be approximately 400 more than it might have been without the program.
- If the program had been implemented statewide, there might have been an estimated 1,200 additional community college fall transfers to UC -- an increase of approximately 25 percent.

Though the data are not conclusive, they indicate that fall transfer rates to UC increased for Asian and Hispanic students from Pilot Program colleges. Specifically:

- The data suggest that the Pilot Program had its greatest effect at UC on Asians, followed by Hispanics. There may have been a slight gain for white students, whereas the data do not reveal any improvement in the black transfer rate.
- At colleges that were not in the Pilot Program, Asian and white fall transfer rates to UC appeared to decline, which strengthens our confidence in the conclusion that the Pilot Program colleges did relatively better for these ethnic groups. For black students, the fall transfer rate showed little change for either SFTC or other colleges.

2. Transfers to CSU

The full year transfer rate to CSU for SFTC colleges increased slightly, while other colleges showed virtually no change. After adjusting statistically for differences between SFTC and other colleges in percentages of full-time and of white students, the SFTC colleges showed an eight percent increase and the other colleges showed a three percent increase. This difference in transfer rates is not great, particularly when statistical uncertainty is considered.

We estimate that the SFTC colleges transferred about 500 more students than they would have without the program. If the program had been implemented statewide, there might have been an estimated 3,300 additional community college transfers to CSU over the course of a full school year -- an increase of approximately seven percent. These estimates must be treated cautiously because of the statistical uncertainty involved in the data.

The data reveal no significant difference between fall pre- and post-implementation in transfer rates for different major ethnic groups, for either SFTC or other colleges. While there may be some small differences, the data are too statistically uncertain to support further conclusions.

D. CONCLUDING ASSESSMENT

The accomplishments of the Transfer Center Pilot Program need to be assessed against the goals and expectations of the April 1985 intersegmental plan. In terms of this plan, the Pilot Program has clearly fulfilled its objectives -- the Transfer Centers are fully operational and there is general cooperation among the segments that exceeds original expectations. The Transfer Centers have learned much since their inception and should continue to learn how to improve. On some community college campuses, Transfer Centers appeared to be contributing to broader institutional changes, such as a stronger campus-wide focus on transfer. It is too early to assess these potentially important secondary effects of the Pilot Program.

Insofar as their effectiveness can be assessed, the data indicate that SFTC colleges had a significant increase in their overall fall transfer rate to UC, and a slight increase in their overall full year transfer rate to CSU. Over the same period, the overall transfer rates to both UC and CSU from non-SFTC colleges remained virtually unchanged. Fall transfer rates for Asian, white and Hispanic students increased at UC for SFTC colleges. Quantitative and fieldwork evidence reveal that the Transfer Centers focused heavily on full-time students who were interested in transferring to four-year institutions.

From the standpoint of statistical analysis, the quantitative evidence does not allow us to draw cause and effect conclusions about the Pilot Program. The data cannot tell us conclusively whether increases in transfer rates were caused by the Transfer Centers per se or were more attributable to other activities and decisions of the participating two-and four-year institutions -- or to other factors altogether. However, the fieldwork revealed that the intentions of these institutions were usually focused or executed through the Transfer Centers and the mechanisms of cooperation that were established for the Pilot Program. These findings, when considered with the quantitative evidence on program impact, indicate that the Transfer Centers played a vital role in the broader picture of improving transfers.

SELECTED BIBLIOGRAPHY

Achievement Council. Unfinished Business. Oakland: May 1988.

Berman, Weiler Associates. A Study of California's Community Colleges. 3 volumes. Berkeley: Berman, Weiler Associates, 1985.

California Community Colleges, Chancellor's Office. Transfer Students. Sacramento: July, 1981.

_____. Field Research Corporation Study. Sacramento: October 1984.

_____. Report on Enrollment, Fall 1987, Report 88-7. Sacramento: July 1988.

_____. Report on Enrollment, Fall 1986, Report 871. Sacramento: June 1987.

_____. Report on Enrollment, Fall 1985. Sacramento: June 1986.

_____. Report on Enrollment, Fall 1984. Sacramento: March 1986.

_____. Report on Enrollment, Fall 1983. Sacramento: June 1985.

_____. Selected Statistics, First Census, Fall 1982. Computer Printout. Sacramento: February 1985.

_____. Transfer Education. Sacramento: October 1984.

California Community Colleges, California State University, and University of California. "A Plan For Implementing the Transfer Center Pilot Program." Sacramento: April 1985.

_____. The Transfer Center Project: A Progress Report. Sacramento: May 15, 1987.

California Legislature. Assembly Subcommittee on Higher Education. "Implementation of Community College Matriculation Program," Oversight Hearing, Report 0239-A. Sacramento: August 1988.

California Legislature. Joint Committee For Review of the Master Plan For Higher Education. Building California's Community Colleges, Report 100-J. Sacramento: February, 1987.

_____. California Faces ... California's Future. Sacramento: June 1988.

_____. California Faces...California's Future. Final Report. Sacramento: March 1989.

California Postsecondary Education Commission. *Background for Expanding Educational Equity*, Report 86-4. Sacramento: March 1986.

_____. *Expanding Educational Equity in California's Schools and Colleges*, Report 86-5. Sacramento: March 1986.

_____. *Facilitating the Transfer of Community College EOPS Students to California's Public Universities*, Report 85-19. Sacramento: 1985.

_____. *Progress in Implementing the Recommendations of the Commission's 1987 Report on Strengthening Transfer and Articulation*, Report 88-38. Sacramento: October 1988.

_____. *Promises To Keep*, Report 83-2. Sacramento: January 1983.

_____. *Reaffirming California's Commitment to Transfer*, Report 85-15. Sacramento: March 4, 1985.

_____. *Strengthening Transfer and Articulation Policies and Practices in California's Colleges and Universities: Progress Since 1985 and Suggestions for the Future*, Report 87-41. Sacramento: November 1987.

_____. *The California Student Opportunity and Access Program*, Report 83-8. Sacramento: February 1983.

_____. *Transfer, Articulation and Collaboration Twenty-Five Years Later*, Commission Agenda Item 10. Sacramento: April 27, 1987.

_____. *Update of Community College Transfer Student Statistics, Fall 1983*, Report 84-10. Sacramento: March 1984.

_____. *Update of Community College Transfer Student Statistics, Fall 1984*, Report 85-21. Sacramento: March 1985.

_____. *Update of Community College Transfer Student Statistics, Fall 1985*, Report 86-11. Sacramento: April 1986.

_____. *Update of Community College Transfer Student Statistics, Fall 1986*, Report 87-22. Sacramento: April 1987.

_____. *Update of Community College Transfer Student Statistics, Fall 1987*, Report 88-15. Sacramento: March 1988.

_____. *Update of Community College Transfer Student Statistics, 1988-89*, Report 89-23. Sacramento: August 1989.

_____. *Views from the Field on Community College Transfer*. Sacramento: 1984.

California State University. Office of the Chancellor. Hispanics and Higher Education: A CSU Imperative. Long Beach: June 1985.

Commission for the Review of the Master Plan for Higher Education. Background Papers - The Challenge of Change: A Reassessment of the California Community Colleges. Sacramento: March 1986.

_____. The Challenge of Change: A Reassessment of the California Community Colleges. Sacramento: March 1986.

_____. The Master Plan Renewed. Sacramento: July 1987.

McIntyre, Chuck. "Assessing Community College Transfer Performance." Research in Higher Education 27/2 (1987).

Mexican American Legal Defense and Educational Fund. MALDEF v. Board of Governors, et al. "Petition to Increase Minority Transfer from Community Colleges to State Four Year Schools." San Francisco: no date.

Renkiewicz, Nancy. Moving On: A Pilot Study of Student Transfer. Sacramento: Los Rios Community College District, August, 1985.

APPENDIX A

APPENDIX A

Transfer Center Evaluation
Topics Covered During Fieldwork Interviews

I. Community Colleges

  A. Transfer Center Program

    1. What are the goals of the Transfer Center?

    2. How is the Transfer Center organized on each campus?

      a. Where is it placed within the organization?
      b. What are the reporting relationships?
      c. How is the Transfer Center staffed?
      d. What is the role of the director?
      e. Does the director have other duties, such as articulation officer, or a counseling assignment?

  B. What activities carry out the goals of the Transfer Center?

    1. How are potential transfer students identified?

    2. How does the Transfer Center assist students to prepare for upper division work?

    3. How does the Transfer Center assist students with the transfer process?

    4. How does the Transfer Center track and support the progress of potential transfer students?

    5. How does the Transfer Center inform and motivate students to transfer?

  C. What support is provided to the Transfer Center on the community college campus?

    1. What support have high level administrators provided to the Transfer Center -- the College President, the Chief Instructional Officer and the Chief Student Services Officer?

    2. What has been the nature and extent of faculty participation in the Transfer Center program?

3. What is the role of the Transfer Center vis-a-vis the counseling department, EOPS and disabled students services?

4. What is the nature and extent of cooperation between the Transfer Center and student services units on the campus?

D. Relations with Four-Year Universities

1. What is the status of articulation between the community college and the four-year institutions participating in the Pilot Program (breadth, general education, majors)?

2. How are inter-segmental activities structured and implemented in the Transfer Center program?

3. What is the nature and extent of inter-segmental cooperation in the Transfer Center program?

E. How successful has the Transfer Center been? What are its strengths and weaknesses?

II. Four-Year Institutions

A. What is the overall transfer context on each campus?

1. How do the CSU and UC campus leaders view the transfer function in this region and/or statewide?

2. What, in their view, needs to be done to increase all transfers and to increase specifically underrepresented student transfers?

3. What, if any, obstacles to transfer exist: structural problems (such as articulation, admissions policies, and selection policies), the transfer process itself (information needed by community college students on procedures and requirements), academic preparation or counseling of community college students. What is the relative importance of these or other factors?

4. What are the selection (admissions) policies on each campus for freshmen and community college transfers?

5. What programs are impacted?

B. What is the role and function of the Transfer Center program in addressing these factors?

   1. What are the goals of the program?

   2. How does it fit into the overall context of the transfer function on the campus?

C. How is the Transfer Center program implemented by the four-year institution?

   1. Where is the Transfer Center placed in the organization?

   2. What are the Transfer Center activities?

   3. What functional support is in place for articulation, admissions data, evaluators, and faculty involvement?

   4. How do the four-year institutions view the success of their Transfer Center effort? Its strengths and weaknesses?

D. Relations with community colleges

   1. What is the status of articulation between each four-year college and the community college(s) participating in the Transfer Center program (Breadth, general education, majors)?

   2. What is the nature and extent of inter-segmental cooperation in the Transfer Center program?

   3. What is the four-year institution's staff assessment of the community college Transfer Center program? Its strengths and weaknesses?

APPENDIX B

APPENDIX B

Transfer Center Student Questionnaire

INTRODUCTION

Hello, may I speak to _______________ please?

If no longer at this number:

Do you have a number where he/she can be reached?

If not there at this time:

Can you tell me the best time to call back?

If asked who is calling, and/or what the call is about:

My name is __________. I'm helping to conduct a study for the State of California involving students who recently attended community college, and I'd like to talk to Mr./Ms. _________ in connection with that study.

If respondent answers, or comes to the phone:

Mr. (Ms.) _______________, my name is _______________, and I am helping to conduct a study for the State of California on how community colleges help students who transfer to four-year campuses. I'd like to ask a few questions about your own recent experience in transferring to _____________. Do you have a few moments? It won't take long.

If respondent asks for more information (how did you get my name/phone number, who is conducting the study, what will the study be used for, etc.): Provide factual information as needed, consulting the materials you were given and the notes you made during your training.

If respondent says this is not a convenient time:

Can you tell me the best time to call back?

Thank you.

Make a note of the time suggested for a return call, and place another call at that time.

If respondent agrees to spend a few moments, proceed with questionnaire.

QUESTIONNAIRE

First, I'd like to ask some questions about your experiences in preparing to transfer.

1. What was the last semester/quarter you were enrolled at (community college) before you transferred to (four-year campus)? **Interviewer: Circle the appropriate answers below.**

   a. Semester/Quarter 1. Fall
   2. Winter
   3. Spring
   4. Summer

   b. Year 198_

2. What semester/quarter did you first enroll at (four-year campus)? **Interviewer: Circle the appropriate answers below.**

   1. Fall 1988
   2. Winter 1988
   3. ______ 1988

3. **Interviewer: If respondent did not enroll at a four-year campus in the semester/quarter immediately following the last semester/quarter enrolled at community college (i.e., did not respond to questions #1 and #2 as "Spring/Fall," "Fall/Winter," or "Winter/Spring," ask:** Why was there a delay in transferring from (community college) to (four-year campus)? **Interviewer: Circle all appropriate answers mentioned by respondent.**

   1. Personal/family reasons
   2. Financial aid problems
   3. Housing problems
   4. Late notification by four-year college
   5. Financial reasons/needed to work
   6. Terms not matched (moved from quarter system to semester system or vice versa)
   7. Other ____

4. When you were attending (community college) did you hear about the Transfer Center on that campus?

   1. Y
   2. N

If respondent answers "No", skip to Question #12.

5. How did you hear about the Transfer Center? **Interviewer: Circle all that apply from the respondent's answer.**

1. Student orientation session
2. Mail sent to home
3. Student newspaper
4. Teacher
5. Counselor
6. Friend
7. Notice posted on campus
8. Noticed Transfer Center and walked in
9. ______________________________
0. Don't know/don't remember

6. Did you use any of the services offered by the Transfer Center?

1. Y
2. N

If respondent answers "Yes", skip to Question #8.

7. Why didn't you? **Interviewer: Circle all that apply from the respondent's answer.**

1. The Center was inconveniently located
2. The Center was not open during convenient hours
3. Center staff did not seem like the kind of people you could relate to
4. Friends said the Center was not very helpful
5. Had all the help needed without bothering with the Center
6. ______________________________
7. __________________________

Skip to Question #12

8. Transfer Centers offer various services. Did you take advantage of . . .? How about . . . ? What about . . .? etc. through #g, then: Did you use any other services? **Interviewer: Read each item below in turn, from a-g. If respondent then answers that "other services" were used, write those down in spaces h and i. Immediately after the first item to which the respondent answers "Yes", say:** Please rate how valuable you feel this service was in helping you prepare to transfer. We'll use a rating scale of one to five, with one equal to little or no value and five equal to substantial value. So if you feel this service was of little or no value to you, give it a "one." If you feel it was very valuable, you can give it a "five." Or anywhere in between. **For each additional item to which the respondent answers "Yes", ask:** And on a scale of one to five, how valuable do you feel this service was in helping you prepare to transfer? **For each item to which the respondent answers "Yes", circle the number next to that item and circle the rating between one and five.**

a. Did you take advantage of workshops on how to prepare for transfer?

little or no value substantial value

1 2 3 4 5

b. Did you meet with any representatives from four-year colleges?

little or no value substantial value

1 2 3 4 5

c. Did you receive counseling by Transfer Center staff?

little or no value substantial value

1 2 3 4 5

d. Did you take advantage of access to four-year college catalogues?

little or no value substantial value

1 2 3 4 5

e. Were you provided application forms for four-year campuses?

little or no value substantial value

1 2 3 4 5

f. Did you get help preparing applications?

little or no value substantial value

1 2 3 4 5

g. Did you take advantage of tours of four-year campuses?

little or no value substantial value

1 2 3 4 5

h. ____

little or no value substantial value

1 2 3 4 5

i. ____

little or no value substantial value

1 2 3 4 5

9. How often would you say you used the Transfer Center to help you prepare to transfer? **Interviewer: Circle the item that is closest to the respondent's answer.**

   1. Once or twice
   2. Three to five times
   3. More than five times

10. On our scale of one to five again, how satisfied would you say you were with the help you got from the Transfer Center? "One" would mean you were very dissatisfied; "five" would mean you were very satisfied.

very dissatisfied very satisfied

1 2 3 4 5

11. You say you were satisfied (dissatisfied). Can you tell me why? **Interviewer: Say "satisfied" if respondent has answered Question #6 with a rating of 3, 4, or 5; say "dissatisfied" if respondent has answered with a rating of 1 or 2. Summarize main points of respondent's answer below.**

____

____

12. What information did you need in order to transfer? Did you need information about . . .? What about . . .? And how about . . .? etc. through #e. Then: Did you need any other information? **Interviewer: Read each item below in turn, from a-e. If respondent says that "other information" was needed, write the type of information needed in space #f. Circle all items to which the respondent answers "Yes".**

a. General education or breadth requirements
b. Requirements for your major
c. Financial aid
d. The applications process
e. Your own eligibility
f. ____________________________

13. Did you get the information you needed?

1. Y
2. N

f. Did you get help preparing applications?

little or no value substantial value

1 2 3 4 5

g. Did you take advantage of tours of four-year campuses?

little or no value substantial value

1 2 3 4 5

h. ____

little or no value substantial value

1 2 3 4 5

i. ____

little or no value substantial value

1 2 3 4 5

9. How often would you say you used the Transfer Center to help you prepare to transfer? **Interviewer: Circle the item that is closest to the respondent's answer.**

1. Once or twice
2. Three to five times
3. More than five times

10. On our scale of one to five again, how satisfied would you say you were with the help you got from the Transfer Center? "One" would mean you were very dissatisfied; "five" would mean you were very satisfied.

very dissatisfied very satisfied

1 2 3 4 5

11. You say you were satisfied (dissatisfied). Can you tell me why? **Interviewer: Say "satisfied" if respondent has answered Question #6 with a rating of 3, 4, or 5; say "dissatisfied" if respondent has answered with a rating of 1 or 2. Summarize main points of respondent's answer below.**

____

____

12. What information did you need in order to transfer? Did you need information about . . .? What about . . .? And how about . . .? etc. through #e. Then: Did you need any other information? **Interviewer: Read each item below in turn, from a-e. If respondent says that "other information" was needed, write the type of information needed in space #f. Circle all items to which the respondent answers "Yes".**

   a. General education or breadth requirements
   b. Requirements for your major
   c. Financial aid
   d. The applications process
   e. Your own eligibility
   f. ______________________________

13. Did you get the information you needed?

   1. Y
   2. N

f. Did you get help preparing applications?

little or no value   substantial value

1 2 3 4 5

g. Did you take advantage of tours of four-year campuses?

little or no value   substantial value

1 2 3 4 5

h. ______________________________

little or no value   substantial value

1 2 3 4 5

i. ______________________________

little or no value   substantial value

1 2 3 4 5

9. How often would you say you used the Transfer Center to help you prepare to transfer? **Interviewer: Circle the item that is closest to the respondent's answer.**

1. Once or twice
2. Three to five times
3. More than five times

10. On our scale of one to five again, how satisfied would you say you were with the help you got from the Transfer Center? "One" would mean you were very dissatisfied; "five" would mean you were very satisfied.

very dissatisfied   very satisfied

1 2 3 4 5

11. You say you were satisfied (dissatisfied). Can you tell me why? **Interviewer: Say "satisfied" if respondent has answered Question #6 with a rating of 3, 4, or 5; say "dissatisfied" if respondent has answered with a rating of 1 or 2. Summarize main points of respondent's answer below.**

____

____

12. What information did you need in order to transfer? Did you need information about . . .? What about . . .? And how about . . .? etc. through #e. Then: Did you need any other information? **Interviewer: Read each item below in turn, from a-e. If respondent says that "other information" was needed, write the type of information needed in space #f. Circle all items to which the respondent answers "Yes".**

a. General education or breadth requirements
b. Requirements for your major
c. Financial aid
d. The applications process
e. Your own eligibility
f. ____________________________

13. Did you get the information you needed?

1. Y
2. N

14. Where did you get the information you needed about . . . **Interviewer: Read only those items that the respondent identified in Question #12 as information that was needed in order to transfer. Circle each item identified from Question #12, and circle the numbers of the information sources, from the list immediately below, that most closely correspond to the respondent's answer on where this information was obtained. If the respondent identifies an information source that is not listed below in items 1-4, write that source down opposite item #5. If the respondent answered item #f ("other information") in Question #12, write that answer into item #f below, and fill in the correct number indicating respondent's answer on where this information was obtained.**

Items respondent could have identified in answering Question #12:

a. General education or breadth requirements

1. Catalogue
2. Counselor
3. Transfer Center
4. Four-year representative
5. ________________________

b. Requirements for your major

1. Catalogue
2. Counselor
3. Transfer Center
4. Four-year representative
5. ________________________

c. Financial aid

1. Catalogue
2. Counselor
3. Transfer Center
4. Four-year representative
5. ________________________

d. The applications process

1. Catalogue
2. Counselor
3. Transfer Center
4. Four-year representative
5. ________________________

e. Your own eligibility

1. Catalogue
2. Counselor
3. Transfer Center
4. Four-year representative
5. ________________________

f. ____________________________________

1. Catalogue
2. Counselor
3. Transfer Center
4. Four-year representative
5. ________________________

15. And on the same scale we used before, how would you rate the completeness and accuracy of the information you received on . . .? **Interviewer: Read first item checked as respondent's answer in Question #12.** "One" would mean you feel the information was quite incomplete and inaccurate; "five" would mean you feel the information was largely complete and accurate. What about . . .? **Interviewer: Read the second item listed by the respondent in answering Question #12. Continue this process until all Question #12 answers are accounted for, and ask the respondent to rate each item on the scale of one to five. Circle the appropriate items and ratings below.**

a. General education or breadth requirements

incomplete and inaccurate substantial value

1 2 3 4 5

b. Requirements for your major

little or no value substantial value

1 2 3 4 5

c. Financial aid

little or no value substantial value

1 2 3 4 5

d. The applications process

little or no value substantial value

1 2 3 4 5

e. Your own eligibility

little or no value substantial value

1 2 3 4 5

f. ____

little or no value substantial value

1 2 3 4 5

16. How often did you see a counselor when you were enrolled at (community college)? **Interviewer: Circle the respondent's answer below.**

1. Never
2. Once
3. Twice
4. Three times
5. More than three times
0. Don't know/don't remember

If respondent answers either "Never" or "Don't know/don't remember", skip to Question 18.

17. Was this individual counseling, group unseling, or some of each?

1. Individual
2. Group
3. Some of each

18. How satisfied would you say you were with the counseling services you received? Let's use our one to five rating scale again: "One" would mean you were very dissatisfied; "five" would mean you were very satisfied.

very dissatisfied very satisfied

1 2 3 4 5

That was the last question. Is there anything else you would like to add about your (community college) experience in preparing to transfer to (four-year campus)? **Interviewer:** Summarize any additional respondent comments in the space below.

____

____

Thank you very much for your time; you were very helpful.

APPENDIX C

APPENDIX C

TRANSFERS TO UC AND CSU, 1982-83 - 1987-88

The following tables show the actual number of transfers to UC and CSU from 1982-83 - 1987-88. As discussed in Chapters I and IV, the pre-implementation transfer rate was calculated by dividing the total number of transfers for 1982-83 - 1984-85 by the total fall credit enrollment for those years. The post-implementation transfer rate was calculated by dividing the number of transfers in 1987-88 by the fall 1987 credit enrollment. The figures in the tables are from data published by CPEC; for 1986-87 and 1987-88 (the Pilot Program years for which we had data), the published data were checked against computer-readable files provided by UC and CSU.

Table C-1

Transfers to UC (Fall)*

1982 - 1987

	Number of Transfers	
	SFTC Colleges	Other Colleges
1982	1306	3824
1983	1380	3925
1984	1401	3856
1985	1395	3536
1986	1270	3588
1987	1617	3848

Source: CPEC, Update of Community College Transfer Student Statistics, Fall 1987, Report 88-15 (Sacramento: March 1988).

*Data on winter and spring transfers to UC are not available for years prior to 1986-87, and were not used in transfer rate calculations (see Chapter IV). In winter/spring 1988 there were 707 transfers to UC from SFTC colleges and 1539 transfers from other colleges (CPEC, Update of Community College Transfer Student Statistics, 1988-89, Report 89-23. Sacramento: August 1989).

Table C-2

Transfers to CSU

1982-83 - 1987-88

	Number of Transfers					
	SFTC Colleges			Other Colleges		
	Fall	Non-Fall*	Total	Fall	Non-Fall*	Total
1982-83	7580	4315	11,895	22,226	11,279	33,505
1983-84	7583	4260	11,843	22,691	11,192	33,883
1984-85	7617	4095	11,712	22,517	11,247	33,764
1985-86	7667	4172	11,839	22,015	11,615	33,630
1986-87	6983	4201	11,184	20,778	11,654	32,432
1987-88	7240	4457	11,697	21,017	11,986	33,003

Source: CPEC, _Update of Community College Transfer Student Statistics, Fall 1987_, Report 88-15 (Sacramento: March 1988); CPEC, _Update of Community College Transfer Student Statistics, 1988-89_, Report 89-23 (Sacramento: August 1989).

*Includes summer, winter and spring transfers in a college year.

Table C-3

Transfers to UC and CSU (Fall) by Ethnic Group*

1982 - 1987

	Number of Transfers		
	UC	CSU	Total
SFTC Colleges			
Asian			
1982	185	845	1030
1983	210	919	1129
1984	208	999	1207
1985	185	1054	1239
1986	169	917	1086
1987	262	878	1140
Black			
1982	54	588	642
1983	69	614	683
1984	51	634	685
1985	39	611	650
1986	50	529	579
1987	65	503	568

Table C-3 (Cont.)

	Number of Transfers		
	UC	CSU	Total
Hispanic			
1982	154	962	1116
1983	160	1008	1168
1984	179	1086	1265
1985	104	1138	1242
1986	132	922	1054
1987	187	1085	1272
White			
1982	850	4477	5327
1983	876	4304	5180
1984	892	4246	5138
1985	871	4024	4895
1986	736	3637	4373
1987	902	3758	4660
Other and Unknown**			
1982	63	708	771
1983	65	738	803
1984	71	652	723
1985	196	840	1036
1986	183	978	1161
1987	201	1016	1217

Table C-3 (Cont.)

	Number of Transfers		
	UC	CSU	Total
Other Colleges			
Asian			
1982	359	1578	1937
1983	401	1745	2146
1984	419	1763	2182
1985	318	1753	2071
1986	422	1733	2155
1987	446	1843	2289
Black			
1982	134	1091	1225
1983	144	1249	1393
1984	122	1196	1318
1985	42	1009	1051
1986	118	874	992
1987	118	972	1090
Hispanic			
1982	258	1623	1881
1983	287	1762	2049
1984	312	1722	2034
1985	235	1721	1956
1986	299	1775	2074
1987	338	1789	2127

Table C-3 (Cont.)

	Number of Transfers		
	UC	CSU	Total
White			
1982	2856	16,183	19,039
1983	2856	16,135	18,991
1984	2800	16,260	19,060
1985	2505	15,725	19,230
1986	2269	14,220	16,489
1987	2563	14,027	16,590
Other and Unknown**			
1982	217	1751	1968
1983	237	1800	2037
1984	203	1576	1779
1985	436	1807	2243
1986	480	2176	2656
1987	383	2381	2764

Source: CPEC, Update of Community College Transfer Student Statistics, Fall 1987, Report 88-15 (Sacramento: March 1988).

* Ethnicity data are not available for CSU full year transfers; the data shown here are for fall transfers only, for both UC and CSU.

** This category comprises students in ethnic groups other than those shown here, and students whose ethnicity is unknown, including students who did not specify their ethnicity.

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